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ABSTRACT

Together in one volume are the essential points of nine national education reports that are most often referred to and discussed, plus a review of a report concerning vocational education. Chapters present and synthesize the major findings and recommendations of the national reports, according to the area of focus--goals and instruction, for example. Listed in order of their publication are the reports discussed: (1) "The Paideia Proposal" (Adler); (2) "A Nation at Risk" (National Commission on Excellence in Education); (3) "Action for Excellence" (Task Force on Education for Economic Growth); (4) "Academic Preparation for College" (College Board); (5) "Making the Grade" (Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy); (6) "High School: A Report on Secondary Education in America" (Carnegie Foundation); (7) "Educating Americans for the 21st Century" (National Science Board Commission); (8) "A Place Called School" (Goodlad); (9) "Horace's Compromise: The Dilemma of the American High School" (Sizer); and (10) "Educating for Tomorrow's Jobs" (National Research Council). Following these are two short observations from other writers (Robert Hampel, Marshall Smith and Lawrence Stedman) about the education reports. The Council for Basic Education reflects on its position on education issues in the concluding chapter of the volume. The appendix presents how the reports were put together, by whom, how long they were in preparation, the method of inquiry used, and the release date of each report. Directions are provided for ordering copies of the reports reviewed. (MLF)

Charting A Course: A Guide to the Excellence Movement in Education

By Ian McNett

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The Council for Basic Education is a nonprofit organization established in 1956 by a group of educators and citizens who believed that an education in the liberal arts should be available to all children. The Council assists parents, teachers, administrators, policymakers, and others who are working to invigorate teaching and learning in the basic academic disciplines.

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Charting A Course: A Guide to the Excellence Movement in Education

This volume is intended to aid its readers to understand, enjoy, and profitably use the major national reports on education published in the past two years. We hope it will be a continuing resource for those who participate in and listen to the debate about educational excellence which was sparked by these reports.

The Council for Basic Education expresses appreciation to Ian McNett, who conceived and wrote the major part of this publication. We are also grateful to three other education researchers and writers, Robert Hampel, Marshall Smith, and Lawrence Stedman, who kindly gave us permission to use their insightful comments on the reports.

Last but not least, we acknowledge the efforts of the Council staff who helped to bring this publication to reality.

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Introduction

Out of its twenty-eight years of concern for American education, the Council for Basic Education is respectful of the effort and sincerity which has gone into the many reports on education published in the past two years.

Their very numbers, and the time and effort involved in reading them all, are formidable obstacles to absorbing or understanding their messages, at a time when it seems to us all voices speaking to the subject of education should be taken very seriously indeed.

Looking back at the reform movements which have peaked and passsed since the Council was founded in 1956, we sincerely believe that this one stems from different sources, has different implications, and will have different results than any of the others. It is very important that these reports, which reflect so much general disquiet and unease about schooling, not be dismissed without careful scrutiny and thought.

With generous support from the Aetna Life & Casualty Foundation, Inc., the Council for Basic Education commissioned Washington, D.C., education writer Ian McNett to bring together in one volume the essential points of nine of the reports which are most often referred to and discussed.

We have also included a review of a tenth report, concerning vocational education.

It is our hope and that of the Aetna Foundation that this volume will serve as a reference to refresh the memory and to encourage further thought about the important topics covered in the various reports.

We strongly urge, of course, that readers use this summary as a guide to the reports themselves, which deserve close individual attention.

The Council for Basic Education has a position on education issues, which is reflected in the concluding chapter of this volume, but the summaries of the reports are intended to present their views only, not those of the Council.

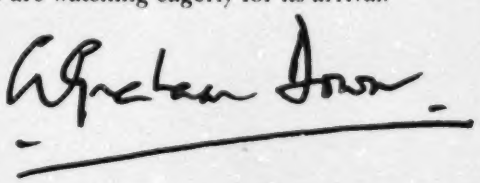
To help us all weigh the recommendations, and to give them perspective, we also include perceptive comments from other writers about the reports.

It would, of course, be futile and inconsequential to prepare such a volume as this if we did not believe the reports matter.

We think they do, and that their influence will be felt in and outside education for a long time to come. We would go so far as to suggest that the broadly perceived problems which surface with striking consistency in the reports can be ignored only at peril by an education system now subject to closer and better informed scrutiny than ever before.

The schoolhouse door is open, and if a good many people, looking in, are not much liking what they see, the answer will not be to close the door. Educators and noneducators alike have new responsibilities for understanding and then explaining what is happening in schools, and how schools either meet or do not meet the needs of individuals and society.

Charting A Course is meant, then, as a sailor's guide in a choppy sea strewn with flotsam. We hope it will help those who have responsibility for bringing the ship of education reform to harbor, as well as those who are watching eagerly for its arrival.



CHAPTER 1

A Year of Reports

The Reports in General

Though they all drive toward the same purpose—reform for excellence—the reports on education reviewed in this book vary substantially in approach, coverage, relevance, rhetoric, understanding of education, and congruence of their prescriptions to the realities of schools.

They also vary widely in format: some are paperbacks, produced by and available only from their sponsoring organizations; others are books published by commercial publishing houses, available in local bookstores and sometimes benefitting from full-press marketing and advertising.

It is not possible to know which reports were the flint and which the spark; they all seem to have emerged, from separate and so far as is known unrelated sources, within a remarkably short period of time over the past two years.

Each report has its particular focus. Four of the nine we will examine in this volume deal with secondary schools; five deal with both elementary and secondary education. One is concerned exclusively with federal education policy. Among those that look at high schools, one, by the College Board, focuses on academic preparation for college. The National Science Board examined schooling from kindergarten to college, but only with reference to the curriculum in mathematics, science, and technology.

The reports are, with some important exceptions, the work of committees; and a major criticism leveled at them has been that the committee process by its nature produces generalizations in both findings and recommendations. On the other hand, the reports appear to represent remarkable consensus among committee members on potentially controversial issues such as tracking of students. Whether the committee process also is responsible for omission from the reports of other controversial subjects, such as bilingual education or the dropout problem, is not clear.

Despite the general impression that the reports are wholly critical of education, they prove, on examination, to be more kind than otherwise. There is considerable pointing to problems, but very little pointing of fingers.

Their tone is on the whole elevated: concepts, goals, and objectives are addressed more often than practice or pedagogy. This has led to other criticisms: that the reports sound in some cases as though no human beings were involved in education (a failing more of the commission reports than of the three highly humanistic books); and that they offer little guidance as to how their lists of remedies are to be applied at the local level.

In style and rhetoric, the reports vary. Some hammer their points with little subtlety; one is best characterized as bland; one is as well crafted and reasoned as a scholarly essay but written in clear and simple language. Two border at times on eloquence, and one of them reads as compellingly as a novel.

All urge that education raise its sights, set higher standards for both educators and students, and examine the fundamental purpose of schools in our society. The objectives to be served by reform in some of the reports are revitalization of the economy or strengthening national defense; in others, the concern is for the quality of individual human lives.

Most of the reports speak to quantitative changes in schooling—more time for instruction, more courses, stiffer standards for graduation or promotion, better pay for teachers. Pedagogy and the structure of schools are discussed in the longer books but generally not in the commission reports. There is sad reflection in some of the writing on the fact that students and teachers alike lack motivation, higher-order reasoning skills, and love of knowledge, but there is not much help for schools on how to develop those qualities.

Running through all the reports, as possibly their most significant single theme, is the idea that higher

standards and improved academic performance should be expected of all children. There is no sense of expectation that some will not achieve. Instead, when the reports are pessimistic, it appears to be because so few students currently are motivated to reach their potential.

The Reports In Particular

Later chapters of this book will present and synthesize the major findings and recommendations of nine national reports, according to the area of focus—goals and instruction, for example.

Here, we briefly describe the reports, listed in the order of their publication.

The Paideia Proposal

This report is in two volumes, with a third in preparation. The first volume, the proposal itself, lays out a plan for improving education, written by philosopher Mortimer Adler and based on the discussions and reflections of an advisory body known as the Paideia Group.

The basic philosophy of *The Proposal* is that all children are capable of learning the basic curriculum they need for continued learning, employment, citizenship, and personal satisfaction. It details the essentials of learning, and the teaching practices and organizational principles that best promote learning.

The second volume, *Problems and Possibilities*, deals with questions raised by the *The Proposal*, and with means and ends, principles of education, and how to cope with barriers to reform.

A Nation at Risk

This report was prepared by the National Commission on Excellence in Education, which was appointed by U. S. Secretary of Education Terrel Bell.

The report captured attention as much for the vividness of its language and imagery, such as the now familiar "rising tide of mediocrity" and "unilateral educational disarmament," as for its charges that the quality of education has declined drastically in the United States.

The report presents evidence of the decline and offfers recommendations for course requirements, time given to instruction, academic standards, and qualifications of teachers.

Action for Excellence

This 50-page report from a Task Force on Education for Economic Growth of the Education Commission of the States offers an "action plan" that "outlines the new skills students will need to meet the demands of a rapidly changing workplace."

The report lists skills and competencies needed or productive employment.

Academic Preparation for College

This is a report by the College Board of what students need to know and be able to do to succeed in college. It spells out in considerable detail the components of competency in various academic disciplines.

Although it is focuses on preparation for college, the report says concern for educational quality "must be expressed in a commitment to quality for all students."

Making the Grade

This 174-page report of the Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy focuses specifically on federal policy in education.

The report recommends that the federal government help to overcome the uneveness of state support of education and urges that the government promote the primacy of the English language as a goal of education.

High School

This book, written by Ernest Boyer for the Carnegie Foundation for the Advancement of Teaching, reflects visits to high schools by Boyer and the project staff, as well as other research.

Boyer suggest that high schools must be reformed to achieve excellence in education; he provides 12 themes for reform, including a core curriculum.

Educating Americans for the 21st Century

This report by a Commission on Precollege Education in Science and Technology of the U.S. government's National Science Board, the governing body of the National Science Foundation, is devoted entirely to a review of mathematics, science, and technology education in United States elementary and secondary schools.

Its recommendations are aimed at making the achievements of American elementary and secondary students in those fields "the best in the world by 1995."

A Place Called School

Based on an eight-year "Study of Schooling" in which education professor John Goodlad and teams of trained observers built an extensive data base from visits to elementary and secondary schools, this book by Goodlad records the environment of education, reaches conclusions, and makes recommendations from its data.

The 396-page book is an encyclopedic body of information about American education which reflects the daily experiences of students and staff and the educational and administrative practices in the schools Goodlad observed.

Horace's Compromise: The Dilemma of the American High School

This book by former Harvard Graduate School of Education dean and private school headmaster Theodore Sizer, like Goodlad's, is based directly on observations of schools by the author.

Sizer visited both public and private high schools, in the United States and abroad, in the course of a three-year "Study of High Schools" sponsored by the National Association of Secondary School Principals and the National Association of Independent Schools.

The book's title refers to a fictional, composite high school teacher through whose eyes Sizer sees the practical problems of education and the compromises forced by the system.

A View of Vocational Education

To the nine national reports on education which are reviewed in this volume, we have added a tenth report, which appeared later than the others and deals with issues not covered in the preceding reports.

It is *Education for Tomorrow's Jobs*, written by the Committee on Vocational Education and Economic Development in Depressed Areas, of the National Research Council of the National Academy of Sciences.

Education for Tomorrow's Jobs makes recommendations specifically for vocational education, including vouchers for students and greater flexibility for school districts to employ vocational instructors who have occupational credentials.

CHAPTER 2

The Blurred Mandate

Organizations can succeed, sometimes, without clearly stated goals against which to measure progress or failure, but the odds are against them.

The national education studies under review here found that the goals of schools are often fuzzy or unrealistic. They ascribe this in part to lack of proper analysis of the purposes of schooling, though some of the reports appear to acknowledge, at least implicitly, that many ill-defined mandates have been laid upon schools by interest groups or political pressure.

Making the Grade, the report of the Twentieth Century Fund, for example, states: "We have always demanded a great deal of our schools, but never before have we demanded as much of them as we have over the past 30 years. On one hand, we have charged them with being the melting pot, the crucible for dissolving racial divisiveness, and on the other for sustaining, and even exalting, ethnic distinctiveness."

"The schools, moreover," *Making the Grade* continues, "have had to provide a wide array of social services, acting as surrogate parent, nurse, nutritionist, sex counselor, and policeman. At the same time they are charged with training increasing percentages of the nation's youth, including large numbers of hard-to-educate youngsters, to improved levels of competency so that they can effectively enter a labor market in which employers are currently demanding both technical capability and the capacity to learn new skills . . . ."

A Nation at Risk states, "That we have compromised this commitment [to educational quality] is, upon reflection, hardly surprising, given the multitude of often conflicting demands we have placed on our Nation's schools and colleges. They are routinely called on to provide solutions to personal, social, and political problems that the home and other institutions either will not or cannot resolve. We must understand that these demands on our schools and colleges often exact an educational cost as well as a financial one."

Unfortunately, an odor of such expectations clings as well to some of the national reports, in which improvement in education is presented as the key to American scientific preeminence, or successful industrial competition with the Japanese, or building a technological society, or stabilizing a tremulous economy.

It is interesting to note that those reports produced by government commissions—the National Commission on Excellence, the Education Commission of the States, and the National Science Board—speak most often about the need for education to produce young people who will help resolve this or that societal problem.

Says the Excellence Commission in *A Nation at Risk*, "If only to keep and improve on the slim competitive edge we still retain in world markets, we must dedicate ourselves to the reform of our educational system for the benefit of all . . . . Learning is the indispensible investment required for success in the 'information age' we are entering."

The Education Commission of the States, in *Action for Excellence*, which was produced by a Task Force on Education for Economic Growth, is the most unabashed of the commissions in linking education improvement to restoring or sustaining America's capacity to compete in foreign trade and military defense.

"Our ability to compete in world markets, to defend ourselves militarily and to sustain vital programs of government will assuredly depend on a growing national economy," the report says. "And it is our judgment that a high general level of education is perhaps the most important key to economic growth."

"The possibility that other nations may outstrip us in inventiveness and productivity is suddenly troubling Americans. Communities all over the United States are depressingly familiar now with what the experts call 'technological' or 'structural' unemployment: joblessness that occurs because our workers,

our factories and our techniques are suddenly obsolete. To many Americans, technological change today seems a dark and threatening force, rather than a bright confirmation of our national genius."

"It is the thesis of this report that our future success as a nation—our national defense, our social stability and well-being and our national prosperity—will depend on our ability to improve education and training for millions of individual citizens."

Not until page 46 of the 50-page report does *Action for Excellence* make reference to any other purposes of education, and then in only two sentences. "We know that education has deeper purposes than merely to prepare people for jobs," the report says. "We are aware that to define the mission of the schools along narrowly utilitarian lines would be to misperceive the purposes of schooling."

"But if preparation for work is not the only aim of education," the report continues, "it is nonetheless a very important aim. And surely education for economic growth is a worthwhile goal around which to organize our efforts and to rally the American people in the cause of improving the nation's schools."

The National Science Board Commission on Precollege Education in Mathematics, Science and Technology refers to but does not repeatedly stress the defense/industry/education connection, and its goals appear to include personal and civic growth, as well as fairer distribution of educational opportunities among all students.

As it was instructed to do, however, the commission speaks only to the importance of upgrading mathematics, science and technology education, without reference to any broader curriculum.

"Improved preparation of all students in the fields of mathematics, science and technology is essential to the maintenance of our Nation's economic strength, to its military security, to its continued commitment to the democratic ideal of an informed and participating citizenry, and to fulfilling personal lives for its people," the introduction to the report reads.

'A Numbing Hodgepodge'

The studies based on visits to schools and reviews of state and district educational statements conclude that the mandate for education is fuzzy, confusing, and probably impossible to accomplish.

"The state and district documents we examined in A Study of Schooling reflect much less than a clear mandate for the schools," wrote Goodlad.

Sizer asserted that there is widespread agreement about educational goals, "but it masks the fact that virtually all the words in these goal statements beg definition."

In Boyer's examination of state education laws, "We discovered a numbing hodgepodge of rules and regulations. In the state of California, the education code is four volumes and 3,700 pages long, and in New York it takes five volumes and 4,000 pages to print the education law."

The Education Commission of the States found that "our greatest overall educational deficiency . . . is our absence of clear, compelling and widely agreed-upon goals for improving educational performance."

Goodlad found the state goal statements strikingly similar in their messages and modes of presentation.

"Usually there is a philosophic preamble extolling the virtues of education," he wrote. "Almost always there is emphasis on the individual and the kinds of traits to be developed through education."

Goodlad found that cognitive development was primary in goals statements, with states concerned "for mastery of basic skills and fundamental learning processes."

He continued, "A major conclusion emerges: state guidelines have remained relatively consistent over the past 50 years in their commitment to the intellectual, social, civic, vocational, and personal development of students, with greater emphasis on the first."

"What is most disappointing in these documents, with some exceptions, is the rather disordered array of topics and form of presentation. There is something for everyone in the materials prepared by the states."

The documents range over such a variety of topics that "one gets very little sense of what is essential and what is secondary," Goodlad commented. "It all reads as though teachers might ignore any or all of it. There is no clear mandate."

The results, Goodlad says, can be pernicious.

"We have assumed since ratifying the Constitution that the states share with local communities responsibility for providing, regulating, and guiding public schools. Nevertheless, there remains enormous ambiguity regarding the state's responsibility for leadership and execution. Are Machiavellian tendencies at work here? There are some advantages, from a politician's point of view, in keeping undefined those areas of policy which can be argued readily and alternatively from many persuasions. Schooling is one of those. The net result is, however, that the schools suffer from lack of a clearly articulated mandate and so are peculiarly susceptible to fads and fashions. These in turn become matters for legislative attention which too often produces just more emergency splints, each holding in place a joint thought to be malfunctioning."

Nor was fuzziness a problem of the state goal statements alone. Goodlad found that "Like state guides, district guides covered a smattering of many things—objectives, topics of instruction, suggested materials, hints for teaching, and, on occasion, suggestions for time allocation. And like state guides,

district directives were not organized, on the whole, in a comprehensive and orderly fashion. Even the goals often were a combination of behaviors desired in students, purposes for teachers, and admonitions to schools . . . ."

Ignored Mandates

State and local goals may be not only fuzzy but also unknown or ignored, the reports said.

Boyer indicated that in his visits to schools, teachers, principals and students often responded to questions about goals with "uncertainty, amusement, or surprise."

"At the district level, we found school leadership frequently preoccupied with administrative procedures," he wrote. "Educational goals appeared to be of only marginal concern."

Responding to questions about what the district's goals might be, teachers and administrators cited such points as "raising the attendance rate," or "developing programs that are consistent with student interest, ability and potential." A student thought the educational goal was to have students pass a competency exam. One teacher said scornfully, "If we had goals, we wouldn't follow them anyway."

Boyer's conclusions about the goals of high schools were almost identical to those Goodlad reached about the state level:

"After visiting high schools from coast to coast, we were left with the distinct impression that high schools lack a clear and vital mission. They are unable to find common purposes or establish educational priorities that are widely shared. They seem unable to put it all together. The institution is adrift."

Goodlad wrote, "When both states and local districts departed from general expectations in the form of total school programs and turned to curriculum and instruction in the subject fields, however, the nature of the documents changed."

Three of the states surveyed were found to produce subject-oriented guides that both teachers and districts could use with "very little modification or effort." But even so, "Overall, teachers in our sample viewed state and local curriculum guides as of little or moderate usefulness in guiding their teaching," Goodlad reported.

What Happened?

Interestingly, Goodlad's interviews with parents in the 38 schools he studied found strong agreement on the goals of education. And buried in the rhetoric of state documents, agreement also emerged.

Parents, according to Goodlad's data, want the schools to prepare their children academically, socially, vocationally, and personally. Students want the same things. Moreover, Goodlad asserted, these basic goals of education have not changed in three centuries.

He and his colleagues examined a "vast array of documents reporting on the ongoing effort to divine, over a period of more than three hundred years, the goals of education and schooling in this country. Four broad areas of goals emerged:

—*academic*—all intellectual skills and domains of knowledge;

—*vocational*—developing readiness for productive work and economic responsibility;

—*social and civic*—preparation for socialization into a complex society; and

—*personal*—emphasizing the development of individual responsibility, talent, and free expression.

A Study of Schooling's surveys found that students, teachers, and parents at all levels of K-12 education rated the intellectual or academic goals of education highest, except at the senior high school level.

"The message here, it seems to me, is that those closest to schools—parents, teacher, and students—see as important all four of those goal areas which have emerged over the centuries . . . . I believe then that many policymakers have been misinterpreting parents' expectations for schools and then overreacting to this misinterpretation."

Goodlad offers the most cogent and complete analysis of how the schools lost their basic mandate to educate young people; the reader is referred to his chapter "We Want It All," pages 33-60 of *A Place Called School.*

Essentially, what Goodlad says is that expectations for schools changed as other institutions, in particular the family and the church, lost important educative functions. Also, excellence in education was one thing when a fraction of the teenage population attended high school, and became something very different when all children attended.

After reviewing the social and political pressures on the schools, Goodlad stated: "The charge to provide quality and equality simultaneously is formidable under the best of circumstances. Given present circumstances, we must address seriously the question of whether our system of schooling is up to it."

Goodlad writes, "No doubt the volume and variety of state legislative activity has contributed to obfuscating the central educational charge not only to local school districts but to the states' own departments of education as well."

He concludes, "My analysis suggests timidity on the part of the several states—a general failure to grasp the opportunity for leadership in a realm where the role of the federal government is ambiguous at best. Perhaps this results from an overdesire, for reasons of political expediency, to reflect the wishes of the local constituencies."

'The Central Charge'

Each of the reports, in some way, addresses what the goals of education should be. All are aimed, in some way, at producing an educated citizenry capable of coping with the demands placed upon it by a rapidly changing, complicated modern society.

Some of the reports addressed the question of goals more directly and more clearly than others. It was Goodlad who stated the case most strongly:

"Two prerequisites stand out as essential for schools to have even a modicum of success. First, the central charge to them must be clearly understood at all levels of the system and by those persons the schools serve."

He said these goals must be supported by a coalition comparable to the one that created the current system of schooling, including the community.

The goals put forth by the reports parallel those Goodlad found parents want for their children—learning to learn, learning for employment, learning for citizenship, and learning for personal satisfaction.

Boyer stated, "High schools to be effective must have a sense of purpose, with teachers, students, administrators, and parents sharing a vision of what they are trying to accomplish. The vision must be larger than a single class in a single day. It must go beyond keeping students in school and out of trouble, and be more significant than adding up the Carnegie units the student has completed."

In *High School*, Boyer suggested four essential goals and the way those goals can be achieved. They are:

"First, the high school should help all students develop the capacity to think critically and communicate effectively through a mastery of language.

"Second, the high school should help all students learn about themselves, the human heritage, and the interdependent world in which they live through a core curriculum based upon consequential human experiences common to all people.

"Third, the high school should prepare all students for work and further education through a program of electives that develop individual aptitudes and interests.

"Fourth, the high school should help all students fulfill their social and civic obligations through school and community service."

Boyer maintained that the many proposals for school reform currently being "heatedly debated" will amount to little more than tinkering with an elaborate and complex system if they are "unguided by a larger vision."

"What is needed—and what we believe these four goals constitute," he said, "is a clear and coherent view of what the nation's high schools should be trying to accomplish."

The reports addressed the issues of goals in different ways, some explicit and some implicit. The Education Commission of the States report, *Action for Excellence*, for example, complained of blurred goals in education, but did not clearly state its own goals.

But the whole purpose and thrust of the task force and its work indicates that for ECS the primary function of education is to prepare young people for employment. The report stated, for example: "Technological change and global competition make it imperative to equip students in public schools with skills that go beyond the 'basics.' For productive participation in a society that depends ever more heavily on technology, students will need more than minimum competencies in reading, writing, mathematics, science, reasoning, the use of computers, and other areas. Mobilizing the education system to teach new skills, so that new generations reach the high general level of education on which sustained economic growth depends, will require new partnerships among all those who have a stake in education and economic growth."

The National Science Board set the date of December 31, 1995, 12 years from the date of its report, which represents "one complete education cycle for a generation of school children," so that "whoever is President of the United States can, in his or her State of the Union address in 1996, tell the American public that their elementary and secondary schools are providing the kind of education in mathematics, science and technology that is the best in the world, that will meet the Nation's human resources requirements and, more importantly, that will provide all of its students a fair opportunity to realize their full potential in the technological environment of the next century."

The Science Board's is one of two of the major reports which makes reference to school desegregation or to assurance of equal educational opportunity for all children as an objective.

The other, *Making the Grade*, the report of the Twentieth Century Fund on federal policy in education, concedes that a gulf exists, and will probably remain, "between the goals set by federal policy and the state of American education." The government's goal in education to date has been equality of opportunity, the report notes, "But there is also need for an explicit expression of Federal attention to issues of educational quality."

The Twentieth Century Fund task force had completed its study before the National Commission on Excellence in Education in 1983 issued its "explicit expression" of concern about educational quality, calling for creation of a "learning society," at the heart of which would be "the commitment to a set of values and to a system of education that affords all

members the opportunity to stretch their minds to full capacity, from early childhood to adulthood, learning more as the world itself changes."

The commission insisted its concern "goes well beyond matters such as industry and commerce" to include "the intellectual, moral, and spiritual strengths of our people which knit together the very fabric of our society."

In *Horace's Compromise*, Theodore Sizer condensed the purposes of education into two: the development of mind and character.

"No other institution in the culture is solely devoted to developing mental powers, and the existence both of powerful means of psychological and political influence through the organized media and of an intellectually complex culture and economy amply justifies, and indeed compels, a focus on the effective use of one's mind. Furthermore, intellectual training is eminently 'useful': it opens means to educate oneself in any sphere of interest or importance."

"Without it, one is crippled. With it, one can gain, on one's own, that comprehensive learning which so attracted our predecessors."

Sizer also argues that schools should develop character because they are "full of people, most of them inexperienced individuals trying to discover their own roles and those of others. This activity of discovery is inevitable, and it can be either ignored, which leaves the process in anarchy or agony, or confronted, which takes time and imagination."

"Useful and sensitive confrontation about conduct can help lead a student to an understanding of restraint and of action and to know when each is appropriate. That is, it can assist in the development of a student's character."

According to *The Paideia Proposal*, "The ultimate goal of the educational process is to help human beings become educated persons. Schooling is the preparatory stage; it forms the habit of learning and provides the means for continuing to learn after all schooling is completed."

The Paideia Group laid out three basic objectives of education, which were undergirded by the overall objective of teaching students how to learn.

First is "that aspect of adult life which we call personal growth or self-improvement—mental, moral, and spiritual."

"A second main objective has to do with . . . the individual's role as an enfranchised citizen of the republic."

The third objective is preparation for the world of work, but the Paideia Group stresses that this is best done not by an array of vocational courses but by giving young people "the basic skills that are common to all work in a society such as ours."

Goodlad and some others included a long list of competencies under the goals of education. We deal with the competencies students need to develop their minds and characters, to prepare themselves for employment and personal satisfaction, in the next chapter.

Reports in Brief—Goals For Education

Goals	Continued Education	Employment Preparation	Personal Citizenship	Economic Satisfaction	National Recovery	Scientific Defense	Pre-eminence
Paideia	✓	✓	✓	✓			
Excellence Commission	✓	✓	✓		✓	✓	✓
ECS		✓			✓		
College Board	✓						
20 Century Fund							
Boyer	✓	✓	✓	✓			
National Science Board					✓	✓	✓
Goodlad	✓	✓	✓	✓			
Sizer	✓	✓	✓	✓			

CHAPTER 3

Competency or Course Requirements: Learning for Mastery

One of the imperatives for better schools, according to Theodore Sizer, is to "insist that students clearly exhibit mastery of their school work."

Such is not the case today, the various reports on education declare. Goodlad noted that most teaching focuses on topics, rather than concepts; and an emphasis on counting courses or Carnegie units as the measure of achievement was pointed out by Boyer and Sizer.

"At some schools, adding up Carnegie units seems to be the main objective," Boyer wrote.

Generally, the reports drive toward the concept that educational improvement, and indeed education *per se* depend on mastery of skills, rather than accumulation of credits. It is lack of mastery and skills that employers, the military, and higher education complain about in high school graduates who have completed the required number of credits but cannot read well enough to follow written instructions, listen well enough to follow oral instructions, or perform routine mathematical operations.

Generally, the reports propose that students demonstrate mastery of a set of skills or competencies, either by examination or through completion of certain required courses.

They advocate a great deal more than the minimum competencies many states have decreed students must achieve for graduation from high school, however. *A Nation at Risk* declares, "'Minimum competency' examinations (now required in 37 states) fall short of what is needed as the 'minimum' tends to become the 'maximum,' thus lowering educational standards for all."

Mortimer Adler in *The Paideia Proposal* discusses three domains of learning—acquisition of organized knowledge, development of intellectual skills, and enlarged understanding of ideas and values—each of which can be achieved by different means of instruction.

Students properly educated in the three domains should be able to do "much better than the present average all along the line," Adler maintains.

Schools today focus on the acquisition of knowledge, which may be what most people think of when they think of education. According to the Paideia Group, the second category of learning, development of intellectual skills, is much more neglected, and broadening of general understanding is almost totally neglected, in part because it is difficult to measure.

Most of the reports focus on mastery of what some of them call the "higher order skills" or "the new basics." When the reports discuss "competencies," they generally do not mean the minimum competencies of state-mandated examinations.

Action for Excellence discusses competency levels in terms of employment.

"If we match these minimal basic skills to today's spectrum of jobs," the report says, "we find that:

- Unskilled jobs can be performed adequately by people with less than today's basic skills: simple hauling and janitorial work, for example.
- Learning-to-learn jobs demand that the worker not only possess basic skills but be capable of acquiring new ones. Most factory and service industry jobs in America fall into this category. And it is here—in imparting the skills of analysis and problem solving that constitute 'learning to learn' skills—that our schools face their greatest need for improvement.
- Professional jobs require adaptability—'learning-to-learn' skills—and more sophisticated intellectual skills as well. Professionals, scientific programmers and analysts, and middle- to upper-level corporate managers are examples."

Many of the reports provide, at length, lists of the competencies young people should master.

The College Board's report, *Academic Preparation for College*, lists more than 100 competencies to be achieved in the various subjects the Board recommends for students who want to go to college.

Goodlad, in *A Place Called School*, attempts to distill from two inquiries conducted during his study a list of the educational goals most commonly set forth in state education documents. He found "considerable

national agreement" on goals, though they are often vaguely or generally expressed, but no consensus on the agenda with which to implement them. He points out that goals are the necessary first step to knowing what specific proficiencies we want students to acquire, and what tests to use in determining their competence.

Briefly, some of the competencies a student should master, according to the reports, include:

- In the area of writing, the ability to prepare and write from an outline, to do research, to critique one's own work, and to make revisions;
- In reading, to draw inferences, relate what is read to other topics, and vary one's reading speed according to the difficulty, importance, and intended use of the material being read;
- In mathematics, to estimate, measure, deal with probabilities, judge the reasonableness of a result;
- In citizenship, to fix one's place in the larger social and cultural context, to understand the broad ideas that shape our world, and to understand the fundamentals of our political and economic system.

A Nation at Risk recommends that standardized tests of achievement (not to be confused with aptitude tests) should be administered at major transition points from one level of schooling to another, and particularly from high school to college or work. The purpose of the tests would be to certify a student's credentials, identify need for remedial intervention, and identify the opportunity for advanced or accelerated work.

The Excellence Commission calls for a nationwide (but not federal) system of tests that would include "diagnostic procedures that assist teachers and students to evaluate student progress."

A number of the reports stress the importance of increasing incentives for students, in terms of both increased expectations and recognition for superior work.

Action for Excellence emphasizes that "promotion from grade to grade should be based on mastery, not age."

A Nation at Risk declares that increased expectations of academic performance "will help students do their best educationally with challenging materials in an environment that supports learning and authentic accomplishment."

"We must demand the best effort and performance all from students, whether they are gifted or less able, affluent or disadvantaged, whether destined for college, the farm, or industry," *A Nation at Risk* said.

Sizer notes the effect of college admissions standards on student performance, saying that open admissions may have been a mixed, if necessary, blessing. "If one could merely attend school and still get a place in college, why work hard?"

"What is completely clear, however," Sizer says, "is that most students see the *diploma* as their high school goal, their passport to the next stage of life. The way to receive it, they now know, is to serve time, to be in attendance the requisite number of weeks in the requisite courses. One thereby amasses 'credits,' which ultimately 'earn' the diploma. *Attendance* is the way it is done."

"If a school awarded the diploma whenever a student reached the agreed-on level of mastery at the completion of a student's study, rather than after four years of attendance and the collection of credits, the effect on student behavior would be dramatic."

"This approach," Sizer declares, "would give the students a clear, academically substantive goal, the obviously appropriate priority. It would usefully undermine the tyranny of age-grading; a student can elect to exhibit his mastery when he is prepared to do so, not just when his birthday signals that he 'ought' to be ready. It would give an incentive to the students' learning on their own, and would reward those who do so. It would eliminate the painfully distorting counting of Carnegie units, where equally useful but very different enterprises—physical education and physics, for example—are equated, usually on an 'hours attended' basis."

While Sizer postulates that students should be taught only the skills of literacy, numeracy, and civic understanding, other reports provide their own bills of particulars.

A Nation at Risk, in its recommendations that all students be required to lay a foundation in the Five New Basics, offers the following outcomes to be expected in each:

- The teaching of *English* in high school should equip graduates to: (a) comprehend, interpret, evaluate, and use what they read; (b) write well organized, effective papers; (c) listen effectively and discuss ideas intelligently; and (d) know our literary heritage and how it enhances imagination and ethical understanding, and how it relates to the customs, ideas, and values of today's life and culture.
- The teaching of *mathematics* in high school should equip graduates to: (a) understand geometric and algebraic concepts; (b) understand elementary probability and statistics; (c) apply mathematics in everyday situations; and (d) estimate, approximate, measure and test the accuracy of their calculations.
- The teaching of *science* in high school should provide graduates with an introduction to: (a) the concepts, laws and processes of the physical and biological sciences; (b) the methods of scientific inquiry and reasoning; (c) the application of scientific knowledge to everyday life; and (d) the social and environmental implications of scientific and technological development.
- The teaching of *social studies* in high school should be designed to: (a) enable students to fix their places

and possibilities within the larger social and cultural structure; (b) understand the broad sweep of both ancient and contemporary ideas that have shaped our world; (c) understand the fundamentals of how our economic system works and how our political system functions; and (d) grasp the difference between free and repressive societies.

• The teaching of *computer science* in high school should equip graduates to: (a) understand the computer as an information, computation, and communication device; (b) use the computer in the study of the other basics and for personal and work-related purposes; and (c) understand the world of computers, electronics, and related technologies.

The following is a list of competencies from the Education Commission of the States report, *Action for Excellence:*

Reading Competencies

• The ability to identify and comprehend the main and subordinate ideas in a written work and to summarize the ideas in one's own words;

• The ability to recognize different purposes and methods in writing, to identify a writer's point of view and tone, and to interpret a writer's meaning inferentially as well as literally;

• The ability to vary one's reading speed and method and one's purpose for reading according to the material;

• The ability to use the features of printed materials, such as a table of contents, preface, introduction, titles and subtitles, index, glossary, appendix, bibliography;

• The ability to define unfamiliar words by decoding, using contextual clues, or using a dictionary.

Writing Competencies

• The ability to organize, select, and relate ideas and to outline and develop them in coherent paragraphs;

• The ability to write standard English sentences with correct sentence structure, verb forms, punctuation, capitalization, possessives, plural forms, other matters of mechanics, word choice and spelling;

• The ability to improve one's own writing by restructuring, correcting errors and rewriting;

• The ability to gather information from primary and secondary sources, to write a report using this research, to quote, paraphrase and summarize accurately, and to cite sources properly.

Speaking and Listening Competencies

• The ability to engage critically and constructively in the exchange of ideas;

• The ability to answer and ask questions coherently and concisely, and to follow spoken instructions;

• The ability to identify and comprehend the main and subordinate ideas in discussions, and to report accurately what others have said;

• The ability to conceive and develop ideas about a topic for the purpose of speaking to a group, to choose and organize related ideas, and to present them clearly in standard English.

Mathematical Competencies

• The ability to perform the computations of addition, subtraction, multiplication and division, using natural numbers, fractions, decimals and integers;

• The ability to make and use measurements in both traditional and metric units;

• The ability to use effectively the mathematics of integers, fractions and decimals, ratios, proportions and percentages, roots and powers, algebra, and geometry;

• The ability to make estimates and approximations, and to judge the reasonableness of a result.

Scientific Competencies

• The ability to understand the basic principles of mechanics, physics, and chemistry;

• The ability to distinguish problems whose origin is in the basics of mechanics, physics, and chemistry;

• The ability to apply basic scientific/technical concepts to appropriate problems.

Reasoning Competencies

• The ability to identify and formulate problems, as well as the ability to propose and evaluate ways to solve them;

• The ability to recognize and use inductive and deductive reasoning, and to recognize fallacies in reasoning;

• The ability to draw reasonable conclusions from information found in various sources, whether written, spoken, tabular or graphic, and to defend one's conclusions rationally;

• The ability to comprehend, develop and use concepts and generalizations;

• The ability to distinguish between fact and opinion.

Competencies for Basic Employment

• The ability and willingness to assume the responsibility of a good citizen;

• The ability to engage in interpersonal relationships;

• The ability to cope with requirements concerning attendance and punctuality.

Economic Competencies

• The ability to understand personal economics and its relationship to skills required for employment and promotability;

• The ability to understand our basic economic system (profits, revenues, basic law of supply and demand, etc.).

Computer Literacy Competencies

•The ability to follow predefined procedures and to understand when the procedure is completed successfully and when it is not;

• The ability to operate equipment that requires understanding of a predefined procedure, to know when operator action is required;

• The ability to recognize when a predefined procedure is in a special state and to identify the source of

assistance;
• The ability to understand the basic functions of a computer device (terminal, CRT, etc.).

Educating Americans for the 21st Century, the report of the National Science Board's Commission on Precollege Mathematics, Science and Technology, says that at the *elementary level, mathematics instruction* should be designed to produce the following outcomes:
• Comprehensive understanding of and facility with one-digit number facts, place values, decimals, percentages, and exponential notations;
• Skill in informal mental arithmetic, estimation, and approximation;
• Ability to use calculators and computers selectively;
• Basic understanding of elementary data analysis, simple statistics and probability, and fractions;
• Ability to use some algebraic symbolism and techniques;
• Thorough understanding of arithmetic operations and knowledge of when each should be used.

At the high school level, mathemathics instruction should be reexamined in light of new technologies, the Science Board believes. For all high school students, discrete mathematics, elementary statistics, and probability should now be considered fundamental; emphasis should be on algorithmic thinking as an essential part of problemsolving and learning of mathematics by discovery. Symbolic manipulation, made possible by the computer, will allow students to perform symbolic algebra at a far more sophisticated level than was possible with pencil and paper.

At both *elementary and secondary levels, science and technology education*, according to the Science Board, should produce the following outcomes:
• Ability to formulate questions about nature and seek answers from observation and interpretation of natural phenomena;
• Development of students' capacities for problem-solving and critical thinking in all areas of learning;
• Development of particular talents for innovative and creative thinking;
• Awareness of the nature and scope of a wide variety of science- and technology-related careers open to students of varying aptitudes and interests;
• The basic academic knowledge necessary for advanced study by students who are likely to pursue science professionally;
• Scientific and technical knowledge needed to fulfill civic responsibilities, improve the student's own health and life and ability to cope with an increasingly technological world;
• Means for judging the worth of articles presenting scientific conclusions.

In his report on high schools, Ernest Boyer does not speak of the competencies he expects students to achieve from courses taken, but he enunciates four "essential goals" of a high school education as follows:
• First, the high school should help all students develop the capacity to think critically and communicate effectively through a mastery of language;
• Second, the high school should help all students learn about themselves, the human heritage, and the interdependent world in which they live;
• Third, the high school should prepare all students for work and further education; and
• Fourth, the high school should help all students fulfill their social and civic obligations.

CHAPTER 4

A Five-Finger Exercise: The Curriculum

John Goodlad in *A Place Called School* compared the curriculum to the five fingers of the human hand. The curricular fingers, Goodlad wrote, are language and literature, mathematics and science, society and social studies, the arts, and vocational education.

This is educational anatomy as Goodlad observed it in 38 schools, and as it probably exists almost universally in American education.

The educational hand would suffer some degree of mutilation under the care of the authors of the nine reports under review here. A finger or two might be lopped off in the interest of education reform, or a finger might be added.

Most of the reports had observations about the current curricular mix, and recommendations about how that mix should be altered, though with widely varying degrees of specificity.

There were two broad areas of strong agreement:
1. Curriculum requirements should be considerably stiffened and the content substantially enriched.
2. Tracking and ability groupings are pernicious practices that cheat students in the lower tracks, and should be eliminated.

In other words, the reports, by and large, prescribed a tougher and more basic curriculum for everyone.

In sorting through the curricular recommendations, one must remember that the different reports have different focuses and purposes. Some deal only with high school, while others include elementary and secondary education within their purview. Some focus narrowly on science and mathematics, the federal role, or preparation for college. *Action for Excellence* focuses on education for economic growth, while the report of the National Commission on Excellence in Education is a call to action with a prescription for reform applicable primarily to high schools.

Several reports criticized the curriculum in American schools, particularly in high schools. The burden of the charge was that the curriculum is unfocused, uninteresting, and undemanding.

A Nation at Risk, for example, declared, "Secondary school curricula have been homogenized, diluted, and diffused to the point where they no longer have a central purpose. In effect, we have a cafeteria-style curriculum in which the appetizers and desserts can easily be mistaken for the main courses."

The commission was concerned about the migration of students to the general track and the displacement of the academic core with an array of electives.

The Education Commission of the States concurred: "Where nonessential and peripheral courses have invaded the curriculum, school systems must have the courage to put new emphasis on core academic subjects and must devote more time to them. Students should be introduced earlier to such critical subjects as science, and they should spend more time exploring them."

Boyer noted that while most students who graduate from an American high school today complete at least three years of English, they also commonly take only one year of mathematics, one-plus years of science, and 2.05 years of social studies. He offered the average graduation requirements of states at the time of his study: 3.53 years of English; 2.05 of social studies; 1.28 of mathematics; 1.24 of science; 1.38 of physical education and health, and 8.02 of electives.

Boyer set two curriculum priorities: mastery of language ("We first mean the mastery of *English*," the report stresses), and a core curriculum which must be studied by everyone.

The National Science Board's panel on precollege math and science education in a section on "Revamping the Curriculum" called for curriculum change with the greatest urgency of any of the reports, suggesting that schools "will have to develop for all students new, coherent patterns of K-12 mathematics, science and technology courses" to meet the educational objective of making all stu-

dents and citizens mathematically and scientifically literate and aware.

"Curriculum content requires revision, not only to make the substance more meaningful to students and excite them, but also to incorporate new knowledge," the panel said in its report, *Educating Americans for the 21st Century.*

The Science Board said it is often difficult to mount curriculum reform at the state and local level, though that is where responsibility for curriculum selection and presentation primarily lies, because of the need to involve experts from many disciplines and fields. For that reason, the report urges "a process which includes national leadership" to evaluate present courses, propose new approaches, and "promote their implementation." Not surprisingly, the report suggests the National Science Foundation, for which the Science Board is the policysetting body, is the federal agency best suited to perform those functions.

The Education Commission of the States, in *Action for Excellence,* devotes one section to curriculum renewal. The report's attention is limited, however, to mathematics, science, and technology curriculum, where it sees need to update increasingly obsolete teaching materials developed by the federal government more than a decade ago. The ECS report also suggests that increased instructional time in key academic subjects and upgraded laboratories, instructional equipment, and textbooks are essential to the curriculum rejuvenation it is proposing.

Taking a much broader view of curriculum, *The Paideia Proposal* asserts that today's education programs produce "worse evils than ignorance, lack of discipline, deficiency in rudimentary skills, and impoverished understanding . . . . The absence of intellectual stimulation and the failure to challenge students by expecting the most of them leads to boredom, delinquency, lawless violence, drug dependence, alcoholism, and other forms of undesirable conduct."

The *Paideia* recommendation is for "the same course of study for all," which would go beyond a core curriculum to require that all students follow the same course of study in the 12 years of basic schooling. The only exception would be in the choice of a second language to be studied, which would be left to the student.

The Paideia Proposal gives considerable attention to Mortimer Adler's theory that the means of teaching the curriculum must differ according to the objectives of the lessons, with didactic or "telling" instruction for acquisition of organized knowledge; coaching, exercise, and supervised practice for development of intellectual skills; and Socratic questioning and active participation by students for enlarging understanding of ideas and values. Adler notes that these methods do not correspond to separate courses, and that more than one kind of teaching and learning may go on in any one class or course.

In a similarly broad view of the basic problems of curriculum, John Goodlad in *A Place Called School* wrote: "What our data suggest to be the major shortcomings of the schools' subject offering is the common failure of the learning activities to connect the student with 'the structure and ways of thinking' characterizing the field, to use the jargon of an earlier period of curriculum reform. This deficiency has curricular as well as pedagogical origins. We found topics (magnets and batteries) and not concepts (energy) highlighted in grade-specific courses of study, reinforced in textbooks and workbooks, and further broken down into facts to be acquired for quizzes."

In a chapter on "What Schools and Classrooms Teach," Goodlad found "a firm place in the curriculum for English-language arts and mathematics, and considerable agreement on a common body of topics and skills to be taught," but "much less certainty on the part of schools, particularly at the elementary level, about either the importance of the social studies subjects or what should be taught in them."

Allocation of time and resources to the natural sciences was less than, but close to, the allocation for social studies, suggesting "some lack of certainty about the importance of science as a field of precollegiate study." Foreign languages occupied a very small proportion of the secondary curriculum—4 percent of the allocation of teachers in the senior highs and a mere 2 percent in the junior high schools.

Goodlad expressed disappointment that arts classes in the schools he studied, like academic subjects, "appear to be governed by characteristics which are best described as 'school'—following the rules, finding the one right answer, practicing the lower cognitive processes."

Both Goodlad and Boyer cite data on the amounts of time spent on various subjects in the schools they visited, and note wide differences between schools and classrooms.

Tracking: The Pernicious Practice?

With greater or lesser emphasis, the education reports either said or appeared to say that the basic curriculum they were prescribing (some were more basic than others) should be for all students. Some of the reports made no direct reference to ability grouping or tracking in elementary school and high school, but those that did, condemned it. There were calls, however, for opportunities for specialization or enrichment for students who have mastered the basic curriculum.

A Nation at Risk declared that its "New Basics" (English, mathematics, science, social science, and computers) are the foundation of success for after-

school years and must, therefore, be the core of the modern curriculum.

"A high level of shared education in these Basics, together with work in the fine and performing arts and foreign languages, constitutes the mind and spirit of our culture," the report said.

Goodlad in *A Place Called School*, Adler in *The Paideia Proposal*, and Boyer in *High School* were forthright in their disapproval of tracking.

"Putting students into boxes can no longer be defended," Boyer wrote in his report on high schools. "To call some students 'academic' and others 'nonacademic' has a powerful and, in some instances devastating, impact on how teachers think about students and how students think about themselves . . . . Students are divided between those who think and those who work, when, in fact, life for all of us is a blend of both."

"Indeed, looking to the year 2000, we conclude that twelve years of schooling will be insufficient. Today's graduates will change jobs several times; new skills will be required; new citizenship obligations will be confronted. Of necessity, education will be lifelong. Therefore, we recommend that the current three-track system—academic, vocational, and general—be abolished. It should be replaced by a single-track program—one that provides a core education for all students plus a pattern of electives, keeping options open for both work and further education."

Goodlad, for his part, said he found no evidence that tracking benefitted those it was supposed to benefit. On the contrary, he said, tracking has proved detrimental to those in the lower tracks—generally the poor and minorities.

"For those readers who worry that the progress of the most able will be retarded, let me remind you that teaching another is one of the most effective ways to acquire mastery," Goodlad said. "Further, research . . . reports no significant advantages of interclass grouping for the most able, but significant losses for the slowest learners."

Goodlad also noted the stability of membership in the ability groupings; once in a lower track, it is rare for a student to change to a higher one, he said.

"One of the reasons for this stability in group membership is that the work of the upper and lower groups becomes more sharply differentiated with each passing day. Since those comprising each group are taught as a group most of the time, it is difficult for any one child to move ahead and catch up with the children in the more advanced group, especially in mathematics. It is not uncommon for a child in the most advanced group to have progressed five times as fast as a child in the least advanced group over a period of a year. Several children in the latter may be detained in the same grade for an additional year."

Moreover, Goodlad pointed out, research also shows that children in the lower ability groupings, whether promoted or not, "show up less well on indices of both personal and social adjustment."

Goodlad called labeling of students by ability level "the self-fulfilling prophesy," and said tracking "serves as an organizational device for hiding awareness of the problem rather than an educative means for correcting it."

Writing for the Paideia Group, Mortimer Adler said, "We should have a one-track system of schooling, not a system with two or more tracks, only one of which goes straight ahead, while the others shunt the young off onto side tracks not headed toward the goals our society opens to all."

Failure to provide the same quality of education for all "is worse than a promise broken," Adler said. "It is an ideal betrayed."

He maintained that if young people are in effect separated into sheep and goats, "the democratic purpose has been undermined by an inadequate system of public schooling."

The answer to individual differences among students, usually cited as the reason for tracking or grouping, is not segregation by ability but "adjusting that program to individual differences by administering it sensitively and flexibly in ways that accord with whatever differences must be taken into account," Adler argued.

Adler conceded that some children may need "more time or more help" to overcome individual deficiencies, but he argued that most remedial education as now practiced aims at correcting defects that result from "educational failures at prior levels of instruction," rather than individual differences.

Remedies

Most of the reports propose their own curricular agendas. The graphic on page 17 is a capsule summary of the recommendations and shows the diversity of the approaches taken by the various committees and commissions.

The Twentieth Century Fund, in *Making the Grade*, reported exclusively on federal policy in education. There were two curriculum recommendations: (1) that the federal government "emphasize programs to develop basic scientific literacy among all citizens and to provide advanced training in science and mathematics for secondary school students"; and (2) that the government "clearly state that the most important objective of elementary and secondary education in the United States is the development of literacy in the English language."

The Paideia Proposal suggests eliminating all electives, except for a foreign language choice, from the curriculum, as well as "all specialized training for particular jobs"—in other words, vocational education. The *Proposal* also calls for "elimination of many

things that now clutter up the school day," including "a variety of pastimes that contribute little to education in comparison to the time, energy, and money spent on them."

Boyer and Goodlad, too, would eliminate training for specific jobs, but they would retain or invent courses that taught young people about the world of work. *Paideia* also approves instruction late in the education process to prepare young people for choosing and finding a career, provided that doesn't involve training leading to premature choice of a job. Students who don't go to college could get job training after basic schooling is completed, "in two-year community colleges, technical institutes, or on the job itself."

In terms of curriculum, Theodore Sizer in *Horace's Compromise* argues that "less is more." He would organize the high school into four areas or large departments:

- Inquiry and Expression
- Mathematics and Science
- Literature and the Arts
- Philosophy and History

Sizer said he proposes so few subjects "to lessen the splintered view of knowledge that usually confronts high school students"; to free teachers from strict specialization, and to simplify the school schedule with its many interruptions by teaching a few subjects in large blocks of time.

He lays out four "general things that one can say about the choice of subject matter in the schools."

- *"If students have yet to meet fundamental standards of literacy, numeracy, and civic understanding, their programs should focus exclusively on these."*
- *"Choices are matters of taste and of priorities sensed at a particular time . . . . What is essential to one time may be anachronistic to another."*
- *". . . the choice of subject matter . . . should support the student's learning of skills . . . . A science course built on sheer memory work, that never gives examples of or experience in scientific inquiry, would be stunted as a course that engages in some sort of disembodied, abstract problemsolving that demands of the student no command of precise knowledge."*
- *". . . the subject matter chosen should lead somewhere in the eyes and mind of the student."*

The Emerging New Curriculum

Depending upon which report is being read, the five, or six, curriculum basics are language and literature, science, mathematics, social studies, the arts, vocational education, computers and technology, and electives. The emphasis is heavily on high school curriculum in the nine reports we are reviewing ; only John Goodlad's *A Place Called School* and Mortimer Adler's *Paideia* deal with elementary education as well.

Language and Literacy:

Every report proposes a full curriculum of language, literature, literacy—what used to be called English. But a number of the reports seem to want to break out to something a little broader.

Theodore Sizer specifically stated that he intends "English" to disappear as a subject. His curriculum would include instead "inquiry and expression," with the latter to mean "all kinds of communication, but above all writing, the litmus paper of thought."

Both Boyer and the Paideia Group include literature and foreign language within the category of language. The College Board's college preparatory curriculum groups reading and literature, writing, speaking and listening, and language under the label "English."

As to the study of foreign languages, Boyer and the Paideia Group would require a foreign language in high school. *A Nation at Risk* and *Academic Preparation for College* call for two years of foreign language study for the college-bound. The Twentieth Century Fund "wants every American public school student to have the opportunity to acquire proficiency in a second language."

The Excellence Commission also urged some exposure to a foreign language in the elementary grades.

Of all the commissions, only the Twentieth Century Fund touched the political hot potato of bilingual education; the total omission of bilingualism from all the other reports is interesting in light of the nation's growing population of persons whose native language is not English. The position of the Twentieth Century Fund was dramatic: it urged that federal funds now going to bilingual education should be used to teach non-English-speaking children to read, write, and speak English; that the federal government should promote proficiency in English for all persons, and that federal impact aid, originally aimed at helping school districts educate federally connected children, should go to districts "overburdened by substantial numbers of migrant children."

Mathematics, Science, and Technology:

One of the strong emphases in the reports is on the need for a scientifically educated citizenry, in part to stock the workforce for a technological future, but also to enable all citizens to cope with the increasingly technological society.

A great deal of ink was used by the reports in describing America's fall from scientific preeminence in the world, and the economic effects of competition from technologically advanced countries such as Japan.

This is what the National Commission on Excellence in Education had to say:

"The risk is not only that the Japanese make automobiles more efficiently than Americans and have

government subsidies for development and support .... It is also that these developments signify a redistribution of trained capability throughout the globe. Knowledge, learning, information, and skilled intelligence are the new raw materials of international commerce and are today spreading throughout the world as vigorously as miracle drugs, synthetic fertilizers, and blue jeans did earlier. If only to keep and improve on the slim competitive edge we still retain in world markets, we must dedicate ourselves to the reform of the educational system for the benefit of all .... Learning is the indispensable investment required for success in the 'information age' we are entering."

The Commission report continued: "The people of the United States need to know that individuals in our society who do not possess the levels of skill, literacy, and training essential to this new era will be effectively disenfranchised, not simply from the material rewards that accompany competent performance, but also from a chance to participate fully in our national life."

Action for Excellence, the report of the Education Commission of the States, declared, ". . . in the future that is quickly emerging, not just people in scientific and technical occupations, but virtually all workers, will face new demands."

The National Science Board warned, "Our children could be stragglers in a world of technology. We must not let this happen; America must not become an industrial dinosaur."

The Board said the new basics "are needed by all students—not only tomorrow's scientists—not only the talented and fortunate—not only the few for whom excellence is a social and economic condition."

The three commissions prescribed a stiff dose of science and mathematics in high school, with a strengthened science curriculum in the elementary grades. The National Commission on Excellence recommended that three years each of science and mathematics be required for high school graduation. So did the National Science Board, which added a fourth year for those seeking admission to college.

The reports were almost unanimous in recommending that at least one-half credit of "computer literacy" be required for graduation. Goodlad stated the case most strongly: "How can we, as a people, continue to be almost completely unconcerned about this inexcusable omission [from the curriculum] of one of the most important inventions of all time, the basis of a social revolution capable of molding the destiny of every human being?" he demand-

High School Curriculum/Reports' Recommendations

	Language and Literature	Social Studies	Math	Science	Foreign Language	Computers and Technology	Arts	Voc Ed/ Career Ed	Electives
Paideia	×	×	×	×	×		×		
Nation at Risk	4	3.0	3.0	3	2 CB	0.5	×	×	
Action for Excellence	×	Economics	×	×		×			
Academic Preparation for College	×	×	×	×	×	×	×		
Making the Grade	×	×	×	×	×	×			×
High School	2.5	3.5	2.0	2.0	2.0	0.5	0.5	0.5	×
A Place Called School +	18%	15%	9%	9%			15%	15%	10%
Horace's Compromise	×	×	×	×					

+ "A Place Called School" recommended curriculum in terms of percentage of instructional time, rather than as credits or years. It called for 18 percent in science and mathematics, which we have divided equally.

ed. "Perhaps, as with radio and television, computers will be peripheral to the school experience. If so, schools could well become peripheral to human experience."

Only Boyer questioned the preoccupation with computers, saying what is needed instead is "technology education."

"We are quite frankly disappointed that none of the schools we visited required a study of technology," Boyer complained. "More disturbing still is the current inclination to equate technology with computers. Today there is a rush to buy more hardware, to get Apples or Tandys into the schools with little thought as to how they will be used and what larger educational purposes will be served."

"We do not deny that the computer will be extraordinarily important in the lives of students. Nor do we deny the value of the computer as a tool for learning .... However, teaching every student to use a computer is not the first priority of education. The great urgency is not 'computer literacy,' but 'technological literacy,' the need for students to see how society is being reshaped by our inventions, just as tools of earlier eras changed the course of history. The challenge is not learning *how* to use the latest piece of hardware but asking *when* and *why* it should be used."

Boyer devotes his chapter 11, pages 186-201, to the uses of technology in the classroom.

Social Studies:

Most of the reports call for a substantial social studies component to the curriculum—three years by the Excellence Commission, three and one-half years by Boyer.

The reports see social studies as the place where young people acquire an understanding of our society, our history, and our democratic processes—what Sizer calls civic understanding.

A monitoring report to the Excellence Commission of state and local activities during the year after the release of *A Nation at Risk* found that many states are requiring at least as many years of social studies as of science and mathematics.

Arts/Vocational Education/Electives:

These are the other three fingers of Goodlad's curricular hand.

The National Commission on Excellence in Education has been criticized for failing to include the arts in its "five new basics." Goodlad does include them in his recommended curriculum, and the Paideia Group stresses the importance of the arts in enlarging human understanding. Boyer lamented that only one school visited by his study required the arts for graduation, and most "shamefully neglected" them.

In *High School*, Boyer recommends that all students study the arts to discover "how human beings use nonverbal symbols and communicate not only with words but through music, dance, and the visual arts."

Goodlad and his colleagues, in the Study of Schooling, observed that students generally like the the arts and vocational education courses better than much of the academic core, and not only because they may be "easier." Even though teachers still do a lot of talking, students participate more actively in those classes than in academic classes, he found, and there is less passivity and boredom.

Still, vocational education would undergo a major reorientation under the recommendations of some of the studies. Several of the reports quote John Dewey to the effect that the best education for employment is a liberal education. Adler, Boyer, and Goodlad all recommend that the schools stop providing job-specific training. Even the one report that focuses entirely on education for economic growth, *Action for Excellence*, does not recommend vocational training, stressing rather the need for higher-order academic skills.

Electives, too, would look very different under the report recommendations, which seek to tie electives either to the academic program followed by a student or to areas of individual interest or talent. Both Goodlad and Boyer would require that electives be rigorously academic; some might be advanced courses from the core curriculum. *The Paideia Proposal*, of course, would eliminate electives entirely.

CHAPTER 5

Instruction: The Essential Connection

Missing from all but four of the reports is any discussion of instruction as a factor in schooling. The reports imply, however, that effective employment of instruction is also missing from most classrooms.

Theodore Sizer says the interaction of students, subject matter, and teacher is the essential triangle in education. The essential ingredient that mediates that interaction is instruction.

And by and large, the four reports that dealt with instruction found that it was done poorly, and in a most limited way.

Perhaps two students quoted by Boyer best sum up the deficiencies in instructional practice from the viewpoint of the consumers. One student from a suburban school with many college-bound students said, "Most classes don't get us to think. In most of the large classes the teacher just teaches to the middle, so we aren't challenged. We just do the work and take a test. The teachers may be doing the best they can, but that's not good enough."

Another student said, "We work hard, but we can handle it. We need more writing. We don't want more busy work, but we'd like to have harder work, not just being told what to do, but being told how."

Goodlad and the others found precious little instructional practice that went beyond busywork and telling.

"One of the most disturbing findings is the narrow range of teaching practices used by the teachers in our sample, particularly at the secondary level," John Goodlad declared.

"Those staffs appearing to have developed considerable capacity for resolving schoolwide isues and problems appeared not to have had comparable success in developing unusually stimulating teaching. They lectured, monitored seatwork, and engaged in activities involving only rote learning about as much as did teachers in schools where many of the problems appeared to have gotten out of hand."

Goodlad found that in general, elementary schools varied teaching practices more than did secondary schools. Secondary teachers rarely varied classroom procedures, he wrote.

"On the whole, teachers at all levels apparently did not know how to vary their instructional procedures, did not want to, or had some kind of difficulty doing so."

Goodlad said the limited amount of time that students were observed reading and writing in class was "a disturbing surprise in our data." Such reading as occurred, he said, was in the form of students taking turns reading orally from a common text. And most writing consisted of answering questions in workbooks and filling in blank spaces in short narratives.

In almost all the classes Goodlad and his colleagues observed in 38 schools, students were more passive than active. Written work took up 28.3 percent of the time in early elementary grades, 30.4 percent in upper elementary grades, 20.7 percent in junior high school, and 15.1 percent in senior high school. Explaining and lecturing, the most prevalent form of instruction, amounted to 18.2 percent of class time in early elementary grades, 20.1 percent in upper elementary grades, 21.9 percent in junior high school, and 25.3 percent in senior high school.

The pattern of activity was the reverse of what one might expect, given the intellectual development of students at various ages. They are subjected to more lecturing and less discussion as they move through the educational system. At no level of public education did discussion occupy as much as 8 percent of student activity. It was least, 4.2 percent, in junior high school.

The impoverishment of instructional practice seemed to be a large reason for the numbing uniformity Goodlad, Sizer, and Boyer found in classrooms they visited.

Both Sizer and Boyer speculated that students and teachers have an unspoken contract. Teachers will not challenge the students as long as students do not disrupt the classroom.

While students were generally well behaved to the

point of docility, there was no vibrancy or excitement in the schools. Instead, visitors reported disinterest on the part of students in most classrooms; they dozed, looked out windows, daydreamed, murmurred to each other—in fact, did almost anything but disrupt or respond to what was being offered.

"Lamentably, far too few American adolescents are hungry students," Sizer wrote. "No more important finding has emerged from the inquiries of our study than that the American high school student, as student, is all too often docile, compliant, and without initiative. Some who have initiative use it to undertake as little engagement as possible with school."

Goodlad speculates that some instructional practices may have more to do with keeping the lid on seething adolescent energy than with developing skills or imparting knowledge.

He wrote, "One begins to wonder if the predominant class patterns of individuals working largely independently in group settings serves an implicit function—that of blocking or at least holding at bay small group alliances which could become disruptive. Certain instructional practices may be used, in part, as policing devices—more so at the junior than the senior high level, probably because the turbulence of early adolescence challenges teachers to exercise more control."

"Again, we see that the demands of managing a relatively large group of people in small space may become a formidable factor in determining and limiting pedagogy," Goodlad said.

He characterized the classroom atmosphere as neutral. "One wonders if the way classrooms are organized and run has something to do with the neutral emotional tone we observed in many of them. Whether we looked at how teachers related to students or how students related to teachers, the overwhelming impression was one of effective neutrality—a relationship neither abrasive or joyous."

Goodlad concluded, "The picture that emerges . . . is one of students increasingly conforming, not assuming an increasingly independent decisionmaking role in their own education . . . . The classroom is a constrained and constraining environment."

Students comply with the neutral norm, established by whatever means for whatever reasons, and expend their energy and excitement in interactions with peers, in after-school jobs, or in extracurricular activities, Sizer and Goodlad reported.

Why Change?

Passivity and docility are seen by Goodlad, however, as symptoms of a deeper ailment having to do with the kind of instruction currently provided in most American classrooms.

He concludes: ". . . these customary teaching procedures rarely provide opportunities for students to practice the full range of learning behaviors implied in our goals for education in schools. Recent analyses show that students are far more proficient in regurgitating facts and performing at the lower levels of cognition than in solving problems. Many can give short, written answers to questions but have difficulty writing a coherent paragraph. Some who have no difficulty recalling important dates and individuals cannot relate two events occurring in different places at the same time."

In short, lecturing and busywork alone will not produce students who meet the four goals of education: students so instructed will not master the skills, knowledge, and understanding that are the true products of an excellent education.

Here, briefly, is Goodlad's summary of observations made in 1,000 classrooms over six years of A Study of Schooling.

"First, the dominant pattern of classroom organization is a group to which the teacher most frequently relates as a whole."

". . . each student essentially works and achieves alone within a group setting."

". . . the teacher is the central figure in determing the activities, as well as the tone, of the classroom."

". . . the domination of the teacher is obvious in the conduct of instruction. Most of the time the teacher is engaged in either frontal teaching, monitoring students' seatwork, or conducting quizzes. Relatively rarely are students actively engaged in learning . . . ."

". . . there is a paucity of praise and correction of students' performance, as well as of teacher guidance in how to do better next time."

". . . students generally engage in a rather narrow range of classroom activities, listening to teachers, writing answers to questions, and taking tests and quizzes."

"The variety of teaching techniques is greatest in lower elementary grades and least in the secondary school years."

". . . large percentages of the students we surveyed appeared to be passively content with classroom life. In general, they felt positive about both peers and teachers."

". . . even in the early elementary years, there was strong evidence of students not having time to finish their lessons or not understanding what the teacher wanted them to do."

The Art of Instruction

Examples of effective instruction in the reports stand out like oases in a dreary desert of uniformity. Sizer cited three teachers who worked with students from a variety of backgrounds and stimulated and excited them to want to learn, and then indeed to learn.

Effective teaching is more risky than what now goes on in most schools, Sizer noted. "Learning is a

complex, effortful, and often painful process. It can be exasperating, too, and also full of the wonder of new ideas and new skills. It can be painful to open one's mind, to change one's views, to try the unfamiliar. Doing such things is often threatening, even as they may be exciting."

Basically, the Paideia Group and Sizer link particular modes of instruction to the acquisition of knowledge, skills, and understanding. It is clear from their discussions that the activities involved in effective instruction are complex, and that they support and relate to one another.

The graphic on page 23, taken from *The Paideia Proposal*, shows Adler's integrated approach to instruction.

This chapter (4) of *The Paideia Proposal* (pages 21-36) is well worth reading, as are chapters 3, 4 and 5 in *Horace's Compromise* (pages 99-130). Sizer and Adler present the most detailed and prescriptive discussion of the instructional techniques that are the most effective and that should be used more effectively in the classroom. Here is a summary of their discussions.

Acquiring Knowledge/Didactic Instruction: For acquiring knowledge of the basic curriculum, Adler says, "didactic instruction," or teaching-by-telling, is appropriate. The method employs textbooks and other instructional materials and is accompanied by laboratory work.

For the Paideia Group, the acquisition of knowledge is not simply a matter of instructional practice or choice of subject matter, but "the concentration and continuity of the study required."

For example, Adler writes, "Instruction in mathematics, beginning with simple arithmetic in the first grade, should rise to at least one year of calculus. It should be integrated from the very beginning with instruction in the use of calculators and lead subsequently to at least introductory instruction in the use of, and programming for, computers."

Sizer underscored this point, quoting Jerome Bruner who "made a strong case for 'structure' as the basis for generative subject matter. He [Bruner] argued that 'grasping the structure of a subject is understanding it in a way that permits many other things to be related to it meaningfully.' To learn structure, in short, is to learn how things are related."

"Those who know how inadequate and fragmentary is the knowledge offered to a large majority of those now graduating from high school will recognize the importance of our emphasis on these requirements," Adler wrote.

Boyer and the Excellence Commission argued that improvement of textbooks is needed to improve instruction. "Most textbooks present students with a highly simplified view of reality and practically no insight into the methods by which the information has been gathered and facts distilled. Moreover, textbooks seldom communicate to students the richness and excitement of original works . . . . We recommend, therefore, that the use of original sources be expanded."

Boyer cited specifically as original sources the United States Constitution, the Declaration of Independence, and *The Federalist Papers*, as well as original works of literature.

The Excellence Commission cited a study which found that many students could master 80 percent of the material in some of their subject matter texts before they opened the books. "Many books do not challenge the students to whom they are assigned," the Commission asserted. The Commission urged that experts from learned and scientific societies "revise, update, improve, and make available new and more diverse curricular materials."

These new materials "should reflect the most current applications of technology in each discipline, and research in learning and teaching," said *A Nation at Risk*.

In addressing the acquisition of knowledge, the National Science Board said that new science curricula should incorporate "appropriate scientific and technical knowledge and [be] oriented toward practical issues."

Development of Skills/Practice and Coaching: " For the acquisition of skills, however, didactic instruction—lecturing, reading a text, filling out a worksheet—is inappropriate," *The Paideia Proposal* says.

What is needed, instead, is practice and coaching, in which the teacher helps the learner to go through the right motions, to organize the sequence of activities correctly, and by correcting faulty performance, "again and again insists on the repetition of the performance until it achieves a measure of perfection."

The skills to be acquired in school are reading, writing, speaking, listening, measuring, estimating, and calculating, according to *The Paideia Proposal*. "They are linguistic, mathematical, and scientific skills . . . that everyone needs in order to learn anything, in school or elsewhere."

Skills relate to "how to do" something, while knowledge is "about" something, Adler wrote. Skills are abilities to perform activities or operations—writing, adding, measuring—while knowledge consists of knowing facts—the Pythagorean theorem, the elements of the Compromise of 1850, the particulars of the Dred Scott Decision.

Skills cannot be acquired in a vacuum, but must be practiced, Adler wrote, "in the very study of the three basic areas of subject matter, as well as in the process of acquiring linguistic competence, competence in communication, competence in the handling of symbolic devices, and competence in critical

thinking." Adler concedes that very few classroom teachers have been trained in coaching for intellectual skills, but he suggests it is just like imparting athletic skills. "A coach does not teach," he points out, "simply by telling or giving the learner a rule book to follow."

The general lack of coaching and drilling in most schools "by itself accounts for the present deficiencies of many high school graduates in reading, writing, computing, and in following directions," Adler maintains.

"Nowadays," Adler writes, "effective coaching and drilling is much too frequently absent from basic schooling."

Sizer echoes much of what Adler says. "In sum," he writes, "these skills—reading, writing, speaking, listening, estimating, calculating, seeing—and the basic modes of imagining and reasoning should be at the core of high school work. They should pervade all subjects offered and be visibly and reviewably part of the school program."

"How are skills learned? By experience. How, then, are they best taught? By coaching."

As an example, Sizer notes that the teacher can tell students the rules of writing, show examples of good and bad writing, or demonstrate how to analyze a piece of work. "However, until you write and I criticize your writing, your expository skills and the thinking behind them lie latent. You may know in the abstract how to write, but you don't know in practice how to do it, at least not very well."

Coaching in the classroom is directly analogous to coaching in sports. Adler and Sizer emphasize, and it is the only way skills can be taught and learned.

Understanding/Socratic Questioning: The third form of learning, acquisition of understanding, requires "the Socratic mode" of teaching, Adler wrote, "a mode of teaching called 'maieutic' because it helps the student bring ideas to birth. It is teaching by asking questions, by leading discussions, by helping students to raise their minds up from a state of understanding or appreciating less to a state of understanding or appreciating more."

The materials of developing understanding are books (not textbooks) and "products of human artistry," says Adler. "The books are of every kind—historical, scientific, philosophical, poems, stories, essays. The products of human artistry include individual pieces of music, of visual arts, plays, and productions in dance, film, or television. The emphasis throughout is on the individual work."

Adler explained that interrogation and discussion stimulate the student's imagination "by awakening the creative and inquisitive powers. In no other way can children's understanding of what they know be improved, and their appreciation of cultural objects be enhanced."

The arts, he said, can be dealt with in seminars in which ideas are discussed, "But like poetry and fiction, they need an additional treatment in order to be appreciated aesthetically." He described the additional treatment as "doing"—performing and composing poetry, music, drama and visual works.

Indeed, Goodlad found that students reported the most enjoyment in subjects in which they have the greatest chance to participate—the arts and vocational courses. What was enjoyable about those courses was not only their reputed easiness, as some critics complain, but the fact that the students are doing something other than listening to an adult lecture to them, according to Goodlad.

Sizer also stressed the importance of questioning as a pedagogical tool, but noted that it "is far more difficult . . . for teachers than are coaching and telling, because it is the least predictable."

The Requisites of Instruction

Boyer stated, "There is a place in the classrooms for telling or lecturing, especially when the goal is the acquiring of organized knowledge. Teachers who can lecture well should do so. There is a place, too, for questions and answers, for structured review and drill. But there comes a time when probing questions should be asked, when the teacher should direct the student's mind from the familiar to that which is less well known but no less important. Socratic questioning is indeed the hallmark of certain great teachers. By this means students proceed from the obvious to the subtle, from easy assumptions to supporting evidence.

Boyer continued, "Much of what the teacher must do to succeed in teaching is a matter of common sense—careful planning for each lesson, educational goals for each day's work, pacing and timing, love of the subject matter, and respect for the students. Clarity in procedures, discipline in carrying through, and the careful measurement of accomplishments are essential elements in the formula for success."

"We are almost embarrassed that so much about good pedagogy is so familiar, but at the same time, we are encouraged by this realization."

The reports concede, however, that it is difficult to coach, critique, question, and lead discussion in classes of 30 or more students, particularly for teachers who must teach five such classes a day.

Boyer quotes one high school teacher, "In world history classes, I used to give more essays and more assignments where students had time to write out their ideas. But in terms of time, I've been reduced to giving multiple choice and matching quizzes. And so I share part of the blame. There was tremendous pressure on me the first year. On Thanksgiving I was grading papers no matter where I went. On

Christmas I was preparing my lectures—so it just became a matter of time. I didn't want to spend all that extra time away from my family."

Sizer puts it this way: "A student's judgment is poorly honed if he merely listens to a dialogue between a teacher and a fellow student. Questioning requires a seminar format, a circle of fewer than 20 people. There must be give-and-take, with the teacher being a participant as well as leader, and in no sense a source of 'answers.'"

"Again, and alas, seminar formats, with classes of 20 or fewer students, are simply impossible in some schools, with the result that the effective teaching of a student to make judgments never takes place."

The Paideia Group and the National Commission on Excellence in Education suggest that some of the costs of improving instruction can be met by shifting resources from other, lower priority areas. There is, however, not way of finding out, or even guessing what the costs would be. Of the reports reviewed here, only one, that of the National Science Board, put a price tag on its proposals.

The Paideia Proposal

Goals	**ACQUISITION OF ORGANIZED KNOWLEDGE**	**DEVELOPMENT OF INTELLECTUAL SKILLS** (skills of learning)	**ENLARGED UNDERSTANDING OF IDEAS AND VALUES**
	by means of	*by means of*	*by means of*
Means	**DIDACTIC INSTRUCTION LECTURES AND RESPONSES, TEXTBOOKS AND OTHER AIDS**	**COACHING, EXERCISES AND SUPERVISED PRACTICE**	**MAIEUTIC OR SOCRATIC QUESTIONING AND ACTIVE PARTICIPATION**
	in three areas of subject matter	*in the operations of*	*in the*
Areas Operations Activities	**Language, Literature and the Fine Arts • Mathematics and Natural Science • History, Geography and Social Studies**	**Reading, Writing, Speaking Listening • Calculating, Problemsolving Observing, Measuring, Estimating • Exercising Critical Judgment**	**Discussion of books (not textbooks) and other works of art • Involvement in artistic activities (Music, Drama, Visual Arts)**

The three columns do not correspond to separate courses, nor is one kind of teaching and learning necessarily confined to any one class.

CHAPTER 6

Teachers: Professionals or Blue Collar Workers?

To the extent that they address the question, all of the nine reports agree that the conditions of teaching and the reward structure for teachers must be drastically improved.

In *Horace's Compromise*, Theodore Sizer writes, "Improving American secondary education absolutely depends on improving the conditions of work and the respect for teachers. No new technology, training scheme, licensure revision, or new curriculum will suffice."

Several of the reports note the corrosive effects on teacher morale of public or media criticism of teaching and schools.

At the same time, the reports are nearly unanimous in condemning the ways teachers are selected and prepared and the working conditions and reward systems that are imposed on them.

What the reports appear to criticize, then, is not so much teachers as a system which puts ill-prepared human beings into nearly impossible situations.

The reports written by Sizer, Goodlad, and Boyer provide the feel and texture of the experience of teaching. They also deal with the need to provide more trust and autonomy for teachers, more intangible issues but ones that may be of prime importance in improving American schools.

The Conditions of Teaching: 'The Hired Hands'

"Many people think teachers have soft, undemanding jobs," writes Ernest Boyer. "One parent told us, 'I'm not sure what they have to complain about. After all, it's an easy life. The hours are good—nine to three—and you get the summer off.'"

The reality, according to Boyer and the other authors, is quite different.

Boyer notes that the average high school teacher meets five or six classes per day, often with 30 students or more in each class. Teachers have minimal time within the school day to prepare for their classes, and in addition to teaching, their duties include reviewing subject matter, preparing lesson plans, correcting and grading papers, making out report cards, and counseling students.

In some schools, budget cuts have made it necessary for teachers to prepare for their classes at night, early in the morning, or during a brief lunch break. Teachers at times are assigned to classes for which they are not prepared.

One teacher told Boyer, "It is not unusual for me to be teaching a course that I know very little about. I could manage it if I had some time to do some background reading. But there is no preparation time here; the day is jammed. So any digging into the subject that I do, I have to do at night. But then that gives me little time to grade reports or handle the paperwork for other classes."

Beyond the crowded academic schedule, teachers are often assigned a variety of menial tasks—lunchroom supervision, hall duty, sponsoring or chaperoning student activities. In many schools, says Goodlad, teachers see so many students in such a fragmented way that nobody in the school has a sense of the overall development of any student.

Further, according to Sizer and Goodlad, teachers are hamstrung in the classroom. In theory, they are the lords of the classroom, doing what they wish pedagogically behind closed doors, but in reality, teachers "lack the respect-laden autonomy enjoyed by other professionals."

Teachers rarely make decisions on the curriculum they will use, and are rarely trusted to select the text and teaching materials. They are told the amount of time to spend with each class, and are rarely consulted about the rules that will prevail in the school.

The teachers' lives, like those of the students, are governed by the mandates of the school board, the district office, and the state department of education.

Sizer comments, "Hired hands own nothing, are told what to do, and have little stake in their enterprises. Teachers are often treated like hired hands.

Not surprisingly, they often act like hired hands."

Goodlad declares that large classes and a fragmented school day place an incredible burden on teachers. He notes the premium that teachers put on maintaining order in the classroom, making it, perhaps, their number-one priority. With 25 or 35 energetic and potentially restless adolescents in the room, teachers may not dare to risk some of the pedagogical techniques that stir students out of passivity, especially questioning, discussion, and active participation.

Both Boyer and Sizer comment on the seeming contract between teachers and students, to wit: students will not upset order in the classroom; teachers will not unduly challenge the students.

Boyer, Goodlad, and Sizer note the time required at the beginning of each class in high schools, for students to settle down. Effective teachers reduce this time significantly, but with many class changes during a high school day, considerable time is inevitably lost. Nor does the fragmented school day provide adequate time for seminars, where discussion and questioning can be carried out for the enlargement of understanding.

Improving the Conditions

Goodlad and Sizer call for the most fundamental changes in teacher working conditions. They go beyond issues of pay and promotion to the very heart of professionalism, control over the conditions of work.

"Excellent schooling requires excellent teachers and principals," Sizer stresses. "Excellent people have self-confidence and self-esteem and expect reasonable autonomy. Therefore, if we want excellent schools, we must give more power to the teachers and principals."

Generally, Goodlad and Sizer propose that teachers be told what the expectations of society are about what students should learn, and that they be given the support necessary to teach to those expectations; but they say that teachers working together under the leadership of principals should determine what happens hour-to-hour and day-to-day in classrooms.

Sizer notes a problem: How can those with legal responsibility for the education of children give autonomy to weak schools or teachers? His answer is that "Schools with demonstrably able faculties would be given much autonomy; those with weak or green faculties, less."

Boyer, Goodlad, and Sizer all recommend reducing the size of classes and the number of classes for which a teacher is responsible, an admittedly expensive innovation that would provide opportunity for improved teaching in the classroom and preparation outside it.

Most of the reports recommend reducing administrative burdens on teachers and the nonteaching duties they now have to perform.

Beyond that, the reports emphasize the importance of order and discipline in schools, saying that part of the working conditions teachers need is safety in their persons and possessions. Schools should impose and enforce codes of conduct, not only to provide an effective learning climate, but also to help teach young people standards of fairness and decency.

Teacher Preparation: 'Uniformly Inadequate'

Most of the reports express strong concern about inadequacies in the recruitment, selection, and preparation of teachers.

The reports of the public bodies—the Education Commission of the States, the National Science Board Task Force, and the National Commission on Excellence in Education—also worry about teacher shortages in critical subjects and teachers of those subjects who are inadequately prepared.

One of the Excellence Commission's findings on teaching is that "too many teachers are being drawn from the bottom quarter of graduating high school and college students."

With the Education Commission of the States, the Excellence Commission is concerned about what ECS calls a "teaching gap," meaning "not necessarily a shortage in sheer numbers, but a shortage of qualified teachers in critical subjects."

All three of the predominantly public sector commissions agree that those critical subjects most often are science, mathematics, and technology. *Action for Excellence*, for example, notes that "51 percent of elementary school teachers report that they received no undergraduate training in science." ECS also cites a survey of 600 colleges which found a 64 percent decline between 1971 and 1980 in the number of secondary school science teachers being prepared—and a 78 percent drop in the number of mathematics teachers.

Boyer emphasizes the necessity of improving working conditions for teachers to improve recruitment. He cites a 30-year-old study that concluded, "By about any academic standard that can be applied, students in teacher training programs are among the least able on the campus."

There has not been much change. Boyer notes that those who enter teaching "come from the lowest half of their college classes." In addition, he quotes an American College Testing Program study that found education students in 17th place (of a possible 19) in mathematics scores, and 14th in English.

Beyond improving working conditions, rewards, and recognition for teachers, Boyer recommends beginning the recruitment process in high school

with a "cadet teacher program." He also recommends that "the nation's colleges and universities consider giving full-tuition scholarships to the top 5 percent of their gifted students who plan to teach in public education."

Other recommendations include grants and loans to attract outstanding students to the teaching profession, especially in areas of critical shortage; and the use of nonschool personnel to help immediate shortage problems in mathematics and science.

Once outstanding students are recruited, they will need access to high quality teacher preparations, but the reports indicate such apparently do not exist today.

"Teacher education programs are disturbingly alike and almost uniformly inadequate," Goodlad writes.

The problem with teacher preparation programs, according to Goodlad and others, is overemphasis on "methods" courses and inadequate preparation in subject matter and pedagogy.

The Paideia Proposal stresses that teachers should receive at least as excellent a precollege education as that recommended for the students they intend to teach. And when they go to college, prospective teachers should pursue a general, liberal and humanistic education, *Paideia* continues, in the course of which they should develop skills, acquire knowledge, and enlarge understanding.

"The course of study here proposed . . . does not include most of what is now taught to college students who plan to teach and specialize for it by taking their majors in departments of education or teachers colleges," Mortimer Adler writes.

"The present teacher training programs turn out persons who are not sufficiently equipped with the knowledge, the intellectual skills, or the developed understanding needed to guide and help the young in the course of study we have recommended."

After a thorough grounding in the liberal arts and subject matter, teachers should be exposed to the theory and practice of teaching in graduate programs and supervised teaching, several reports recommend.

Both Sizer and Adler stress the importance of coaching teachers in the instructional practices they will use when they reach the classroom. Sizer advocates that "after teacher candidates have gained a solid mastery of their subjects, their training must be almost wholly school-based. One learns to teach by coaching; one needs to be teaching in order to be coached. The best coaches are usually fine teachers themselves. The analogy to writing deserves endless emphasis."

Adler also emphasizes, "It is by the skillful use of . . . self-understanding that the teacher can help others to learn. This skillfulness is developed best by practice under supervision; that is, by coaching. All the skills of teaching are intellectual skills that can be developed only by coaching, not by lecture courses in pedagogy and teaching methods such as are now taught in most schools or departments of education and are now required for recertification."

Teachers as Professionals

If teachers are treated like hired hands, they will not act like professionals. The national reports indicate that part of the problem may be that teachers are paid like hired hands; they note that teachers have little financial incentive to remain in teaching and may have fewer avenues for promotion than many careers that require less formal education. These factors tend to force good teachers out of teaching and into administration or other types of employment.

Goodlad finds "the flatness of the profession—that is, the low ratio of salaries after 10 years to beginning salaries—is a major deterrent to entering."

"Part of the responsibility for this state of affairs lies with the organized profession itself," Goodlad continues. "Given the labor-intensive character of teaching, it simply is not economically feasible to pay attractive salaries to all who teach, if 'all who teach' is to mean a certified teacher in every classroom, with class enrollment restricted to 25 or even 30 students."

"If this is to be the stand of the teaching profession into the indeterminate future, we might as well resign ourselves to a permanent state of low pay for teachers and the continuation of teaching as a marginal profession."

The alternative, Goodlad asserts, "is a deliberate distinction among various assisting and apprentice roles, more highly paid career teachers, and . . . head teachers."

This or some other form of differentiated or performance-based pay or career ladder is proposed by a number of the reports. The Excellence Commission, for example, recommends, "School boards, administrators, and teachers should cooperate to develop career ladders for teachers that distinguish among the beginning instructor, the experienced teacher, and the master teacher."

The commission also proposes, "Salaries for the teaching profession should be increased and should be professionally competitive, market-sensitive, and performance-based. Salary, promotion, tenure, and retention decisions should be tied to an effective evaluation system that includes peer review so that superior teachers can be rewarded, average ones encouraged, and poor ones either improved or terminated."

None of the reports provides an analysis of what its salary and career ladder proposals would cost.

CHAPTER 7

Schools: The Fulcrum of Reform

In the past, education reform efforts have generally been imposed from the top down, or from the outside in. Experts or policymakers have decided the major elements of change and have sought to require or persuade schools and teachers to adopt them. Not surprisingly, the efforts were often resisted and resented at the local school level.

Among the reports we are reviewing, *A Nation at Risk, Action for Excellence,* and *Making the Grade* seek reforms that must be mandated by state or federal governments; and indeed there has been a flurry of activity in state legislatures to enact and implement some of the recommended changes.

Undoubtedly, while the reform climate lasts, local school districts, schools, and teachers will go along, willingly or unwillingly, with reform activity imposed from above. However, unless the school staff is in some way made the fulcrum of reform, and is given ownership of it, efforts at educational improvement will not be far-reaching or lasting.

Sizer, Goodlad, and Boyer all speak of the weight of bureaucratic structures upon vibrancy and effectiveness in the schools. Sizer writes at some length about the development of the bureaucratic model and its impact on the schools. His chapter on "Hierarchical Bureaucracy," pages 205-213 of *Horace's Compromise*, is well worth reading.

Sizer notes the "breathless belief in systems" of 20th century Americans. Late-19th century social reformers placed great faith in "scientific management" and a "rational, politics-free system, driven by dispassionate professionals." The result in school organization was a pyramidal model, with directions flowing from governing boards and administrators at the top to teachers and classrooms at the base.

"These pyramids solidly survive," Sizer writes. "Indeed, they have become so familiar that any other form of providing for the schooling of young Americans seems unimaginable. While there are obvious advantages to hierarchical bureaucracy, it has its costs, and these are today paralyzing American education. The structure is getting in the way of children learning."

Sizer lists six defects of pyramidal government by bureaucracy:

- It overlooks special local conditions, particularly school-to-school differences.
- Bureaucracy depends on specific, measurable results, which leads to considerable silliness in the collection of data. Intangible qualities of schools, students and teachers remain unknown, unaccounted for, and unrewarded.
- Large administrative units depend on norms, the basis of predictability. Individual differences are therefore usually ignored.
- Centralized planning requires a high degree of specificity, which leads to excessive specialization and a fragmented view of each student.
- Bureaucracies lumber, and once practices become operative, they are very hard to change. "Every regulation, agreement, and license spawns a lobby dedicated to keeping it in place."
- Hierarchical bureaucracy "stifles initiative at the base; and given the idiosyncracies of adolescents, the fragility of their motivation, and the need for their teachers and principals to be strong, inspiring, and flexible people, this aspect of the system can be devastating."

Sizer concludes, "It is astonishing that so few critics challenge the system. In an absolute sense, the learning exhibited by even a 'successful' student after twelve thousand hours in the classroom is strikingly limited. When one considers the energy, commitment, and quality of so many of the people working in the schools, one must place the blame elsewhere. The people are better than the structure. Therefore the structure must be at fault."

Boyer's assessment concurs with Sizer's. "Today, most principals are caught in a complicated bureaucratic web. Far too many of our school systems are top-heavy with administration; they are administered to within an inch of their lives. School leader-

ship is crippled by layer upon layer of administration. And while control is rooted in the need for accountability, the reality is that it makes change in many schools all but impossible.

Every Tub on Its Own Bottom

"I believe that . . . the principle of 'every tub on its own bottom,' or nearly on its own bottom, would go a long way toward developing schools that took care of their own business, rectified chronic problems, and communicated effectively with parents—characteristics of the more satisfying schools in our sample," Goodlad wrote.

"Further, I envision that, in time, those associated with schools would become increasingly creative in designing alternative programs of instruction—something not characteristic of the schools in our sample. And finally, I believe that the potential for developing an increased sense of ownership on the part of those associated with the local school would be vastly enhanced."

Goodlad says the guiding principle is that the school must become largely self-directing; if drug abuse becomes a problem, mechanisms can be deployed to address it; if the problem is declining achievement levels in reading, the school will make improved reading a top priority.

"This approach to change," Goodlad noted, "differs markedly from starting out by bringing in innovations from outside the school."

Sizer provides a somewhat different perspective, from the vantage point of the "essential triangle" of student/teacher/subject matter. The primary question, he contends, should be "How can adolescents be assigned to learn most efficiently?"

"Examination of the triangle would disclose its inevitable and often constructive variability. What is effective at one point may not be effective at another. Only the people at the level of the basic triangle will know which is which. Accordingly, they need a large measure of autonomy in making the necessary adaptations."

Sizer emphasizes the importance of adaptability because of the varying learning styles of students and teaching styles of teachers. No one set of rigid procedures, imposed by the hierarchy that reaches in some cases through the state level to the federal, can allow for the variation necessary to provide every student with the best possible instructional methods and pace for that student's needs.

"As a practical matter," Sizer concludes, "the abler and more experienced [teachers] need to be given more authority than the less able and the inexperienced. This may, paradoxically, create mini-hierarchies, contrary to the claim for autonomy. However, they are necessary, and they are tolerable as long as they are kept close to the pupils being served."

The Educational Leader

In a decentralized system, with schools as the center of educational improvement and effective practice, a strong leader is needed at the school level.

Most of the reports address the central role of the principal as the leader of the school. Some stress the principal's role as the educational leader, the head teacher, the primary teacher trainer; others emphasize the maintenance of order and effective learning climate as the principal's primary responsibility.

Mortimer Adler writes that the principal's role "should not be solely or even primarily concerned with running the school efficiently or economically, or merely with keeping the peace of the community. Keeping peace, doing justice, balancing budgets, enforcing laws is the main business of the political community at any level; they are not the main business of the school community. Its main business is teaching and learning. The head of the school—its principal—should, therefore, administer all other affairs in ways that facilitate the main business.

Adler declares that the principal should have been "a notably competent and dedicated teacher, with much classroom experience . . . . The principal must be first and foremost what the title implies—the head teacher, or what in private school is called the headmaster, leader of the other teachers who are also called masters."

The principal does not engage in teaching, according to Adler, but provides educational leadership: "It has been shown in repeated studies that the quality of teaching and learning that goes on in a school is largely determined by the quality of such leadership."

Two conditions appear to be linked with effective performance of the principal, says Adler.

First, the principal should have authority and be given the power to enforce standards of conduct. "It is also necessary for parents to recognize the principal's authority in enforcing rules of conduct that make the school community a safe and sane place for learning," Adler concludes.

Goodlad holds that the principal is too busy administering the school to serve the role of educational leader or head teacher. He proposes that the leadership function be fulfilled by someone called "head teacher," which would be one of the rungs of the ladder he proposes for the teaching profession.

But there is agreement on the need for educational leadership. One could devise a system in which the principal had someone to help him/her with administrative busywork, freeing the principal both to act as head teacher and to focus on the overall management of the school and its learning climate.

Boyer devotes a full chapter to the role, responsibility, selection, and training of principals. *A Nation*

at Risk and *Action for Excellence* also urge a strong role for the principal. Sizer was largely silent on the issue of educational leadership and the role of the principal.

Action for Excellence urges "that school systems expand and improve, at every level of administration, their use of effective management techniques."

"Business can help here," the report says, "with exchange programs and other collaborative efforts to train school managers and to keep school officials abreast of the latest techniques in fiscal and personnel management."

One cannot quibble with the need to manage schools responsibly and well, but it is not clear that "effective management techniques" are always present in business, or that the factory or business model will necessarily work in education.

Toward an Orderly Learning Environment

As leader of the school, the principal can do much to provide an orderly learning environment. According to a number of the national reports, however, especially those based on school visits, an orderly environment does not prevail in many schools today.

The problem stressed by the reports is not student misconduct and disruption, though certainly there is violence, intimidation, drug and alcohol abuse, and vandalism, particularly in "some of the places where young citizens of the poor are now at school," as Sizer puts it.

The majority of middle-class Americans would be shocked and afraid of many of those ugly and disrupted schools, Sizer says. He deplores that some schools, particularly those serving the poor, fall so far short of providing an education in a place that is "attractive and free of fear."

But he and the other writers talk also of another kind of disruption, which they see as more pervasive and fully as serious as that involving law and order. It is the many interferences with orderly instruction that are imposed by the school itself, thereby telegraphing the implicit message that academics are not, after all, the most important thing that goes on in this institution.

Boyer and Sizer note how often instructional time is interrupted by the blare of the loudspeaker or by messages carried to the teacher from the office. Usually the interruptions have nothing to do with teaching and learning. To this would be added the amount of time subtracted from actual instruction by extracurricular activities, including athletics.

Two of the reports, *A Nation at Risk* and *Action for Excellence*, specifically suggest lengthening the school day and/or year, and a number of states have since rushed to do one or both by legislation. Because that is costly, however, many of the states have also pulled back to another position, asking for studies or regulations aimed at making more effective use of the time schools already have. This involves, variously, restructuring time off for athletics, requiring that "instructional days" for state aid mean just that, limiting extracurricular activities to Fridays, or giving school districts flexibility to arrange their schedules as seems most productive for their geographic locations or student populations.

Some states which have not lengthened the student year have increased the teachers' year by one or two weeks, for planning, curriculum development, and training.

Suggestions in the reports for longer schooling are based in part on the longer school days and years in foreign countries, including Japan, which appear to be outdistancing America in student proficiency in certain disciplines such as science and mathematics.

School Size

Goodlad, in *A Place Called School*, makes a far-reaching proposal to limit the size of schools.

"What are the defensible reasons for operating an elementary school of more than a dozen teachers and 300 boys and girls?" he asks. "I can think of none. One might put forward economic reasons, but I am unaware of supporting data."

Recognizing that school facilities already exist, and it is probably impractical to create small schools anew, Goodlad proposes that schools be subdivided into smaller units in existing buildings. "Described simply, a school of, say, 3,000 students is divided into relatively self-contained smaller schools. The result might be six schools of 500 pupils each."

Each school would have its own curriculum, students, faculty, and counselors, Goodlad says, and students would remain in the same school through junior and senior high school.

The system would have many advantages, Goodlad believes. For one thing, it would provide for greater sustained contact between students and teachers, lack of which he regards as a serious problem in traditional schools. Also, the small school system would facilitate mastery learning and permit students who achieve mastery early to take advantage of advanced courses.

"With several grade levels available to them in a single house (school), teachers have an enhanced opportunity to adjust levels of work to students' present attainments.

Goodlad's chapters "Improving the Schools We Have" and "Beyond the Schools We Have" are well worth reading for these and other recommendations that deserve thoughtful consideration by school people.

CHAPTER 8

The Structures of Change

Of the reports, John Goodlad's *A Place Called School* most directly addressed the *process* of educational change at all levels and sought to sort out or reassign roles and responsibilities in the existing schools hierarchy, as would almost surely be necessary if the recommended reforms were to take place.

That there will be "winners" and "losers" within the education establishment under even the most modest changes, and that turf protection has before now constituted an effective barrier to reorganizing the system are facts of life which the reports either had not time or did not consider themselves bound to consider.

Goodlad stresses that education improvement will not happen unless those who seek it understand the ecology of schools. If only from the standpoint of knowing the habitat of education, his report should be required reading for reformers.

Goodlad's detailed examination of 38 schools over a period of six years is the most intensive study of American education to date, though he is quick to point out that the schools he studied were at best only a representative sample, and the conclusions he drew may not apply to all schools.

But of the reports, Goodlad's offers the best understanding of the feel, texture, and atmosphere, and the conditions of daily life, in classrooms and schools, kindergarten through 12th grade, and he offers a model of the kinds of questions to ask and the kinds of observations to make in planning educational improvement.

Goodlad is convinced, for example, that improvement must essentially be a school-by-school process. He would severely limit the authority of the state and the district to impose detailed requirements on individual schools, and he believes authority and responsibility must be differentiated and distributed across the education system.

"State officials, including the governor, should be held accountable for articulating a comprehensive, consistent set of educational goals for the schools," Goodlad wrote. The recommendations would provide a common framework for schools "within which there is room for some differences in interpretation at the district level and for some variations in schools resulting from differences in size, location, and perspective."

"Clearly, state governments would play a leaner role than at present. They would have virtually no involvement in the specifics of instruction. But they would have increased concern for the conditions enhancing or hindering the development of effective, satisfying schools."

In this regard, states would assure the production and dissemination of knowledge required for "appraising assets and liabilities at all levels of the system." Goodlad stresses also that states have a right and a responsibility to articulate educational expectations for schools, and to call on districts to assure comprehensive. balanced curricula in each school.

At the district level, Goodlad proposes "a genuine decentralization of authority and responsibility to the local school within a framework designed to assure school-to-school equity and a measure of accountability."

Each school, he said, would be held to account for providing a balanced program of study. Each school would present its program plan and a budget to the superintendent through the principal. The budget would be projected over a three- to five-year period, with annual updating and review.

Goodlad specified, "The superintendent and board should concern themselves primarily with the balance in curricula presented rather than exact school-to-school uniformity, with the processes employed in the planning effort, and with equity in the ultimate distribution of funds."

"They should avoid specifications for local school planning, providing at most rather broad guidelines and consultative assistance."

"The essence of the district-school relationship is the review process, in which the principal presents

and justifies the plans developed under his leadership. The superintendent, in turn, following appropriate consultation, should be free to allocate discretionary funds to support unusually creative efforts and to deny funds for failure to plan."

Though Goodlad would decentralize, he would not sever schools from the district or each other. He envisions schools linked together at the hub—the district office—and to each other, like the rim of a wheel.

In this schema, Goodlad sees the principal as "the captain with full authority and responsibility for the ship."

But if the principal is reasonably wise and prepared for the post, he or she will make decisions in company and with the counsel of others. Goodlad visualizes a policy and planning group, chaired by the principal, with representatives including teachers, parents, possibly a nonparent and a representative from the district office. Teachers would have a say in how money is allocated for materials, plus some funds to spend as they see fit.

"Even in the domain of allocating the funds spent on teachers, the individual school should be free to exercise some control. For example, anticipating the departure of two teachers, a remaining group of three primary teachers might recommend the addition of no regular replacements. Rather, they might want to employ, with the same expenditure of funds, five or six part-time individuals to work under their supervision. The result would be to reduce the number of fully qualified teachers but to increase the number of adults available to the children. A team-teaching project conceived in this way has a far greater chance of being successful than one imposed on all schools from the central office."

"Individual schools should have the authority and responsibility to develop long-term staffing plans, to be effected through judicious replacement of retirees and those teachers who go elsewhere. For example, an elementary school faculty might specify that the next teacher hired should possess, in addition to general teaching ability, a background in mathematics, in order to round out a faculty representing a wide range of specialized backgrounds, each serving as a resource person to all other teachers but each assigned as a regular classroom teacher."

Goodlad also proposed that schools be organized vertically rather than horizontally, with a proposed 12 years of education divided into three closely linked phases of four years each.

The first would be a primary phase beginning at age four and continuing through age seven, covering the second year of nursery school, kindergarten, and the first three grades; the second would be an elementary phase enrolling children from age eight through 11, replacing the present grades four through eight; and the the third would be a secondary phase for the 12- to 15-year age group.

That might lead to various forms of reorganization, Goodlad said, possibly an equal enrollment of 400 students in each phase, all housed close together; or the first two phases housed as an elementary school from which students would go on to a 600-student or 800-student secondary school. Both structures would eliminate the junior high school.

A cluster of teachers would be responsible for the entire group of boys and girls for the full spread of years, providing possibilities for teachers and children getting to know each other, and for more individualization and intimacy in the learning process, as well as peer teaching.

"Teachers will be willing to engage in activities requiring a longer time frame. Head teachers will be called upon to assure students' involvement in all the modes of learning, not just listening, reading texts, or taking quizzes."

Paideia Organization

The Paideia Proposal also assumes the individual school as a locus for reform.

"Do these ... things," *The Proposal* advised school administrators and boards, "in a manner that suits the population of your school, both teachers and students; do these things by making your own choice of the materials to be used and your own organization of the course of study from grade to grade; do them with the three fundamentals of basic schooling always in your mind, and you will have started on its way the reform of basic schooling upon which the prosperity of this country and the happiness of its citizens depends."

Responding to questions about school structure under *The Paideia Proposal*, Mortimer Adler in the second volume of the three-part *Paideia* series, *Paideia Problems and Possibilities*, said that the overall size of a school makes very little difference to the *Paideia* reforms, "as long as teachers and students can gather in numbers appropriate to the mode of teaching and learning that is to be carried on."

As to what would be ideal class sizes for the three different mode of teaching (didactic or telling, coaching, and Socratic or questioning) called for in *The Paideia Proposal*, Adler indicated that didactic teaching can be done well in a class of 35 or 40, or in a lecture hall or laboratory with even larger attendance; it can also be done by closed-circuit television by teachers not on the school's staff.

Coaching of intellectual skills, on the other hand, cannot be done well with more than 10 students per teacher, and it will be better done if the ratio is more nearly five or six to one.

Socratic teaching in the seminar manner should have at least 15 students and can have as many as 20.

Asked if the *Paideia* program requires structural changes in school buildings, Adler indicated that the ordinary classroom is suitable for didactic instruction, but not for much else.

The image of an art studio should be kept in mind in thinking about the best kind of room for coaching intellectual skills, Adler said. The coach should be able to move around and amidst the small group of students he is supervising, directing, and correcting, with all students working "in his immediate vicinity and under his watchful eye and within the reach of his hand."

The Socratic seminar calls for a room large enough to accomodate a "hollow square table, around which all participants, both students and teachers, sit, able to see one another and talk to one another in the cross-fire of a lively conversation." A classroom with fixed seats, set in rows, "simply will not do for this purpose."

In general, the self-contained elementary school classroom, with one teacher teaching the same students all day, probably has sufficient flexibility to accomodate the different amounts of time best suited for didactic teaching, coaching, and seminars. Junior and senior high schools will have to change their customary 45- to 55-minute periods to allow for the longer time spans needed for coaching and seminars.

Structure: *Horace's Compromise*

Theodore Sizer, in his book *Horace's Compromise*, describes the current structure of education as "organizations arranged in pyramidal tiers, with governing boards and administrators at the peaks and classrooms at the base." In that structure, governance flows from top to bottom, but the people at the top see only "vague outlines" of what really goes on at the base.

If truly "scientific" managers were today given the task of freshly designing ways and means of educating adolescents, they would concentrate their attention on the base of the triangle, where students and teachers come together, Sizer said. Since only the people at the base know what is effective in their triangle, they need a large measure of autonomy in making the necessary adaptations.

Sizer would assign responsibility for high schools to scientific managers, who would see to it that the purposes of the schools were clear and that they were staffed with people "who are moved by and who can move adolescents—however difficult it may be to train teachers to develop these characteristics and politically tricky to evaluate them."

A high school teacher in Sizer's structure would have direct responsibility for fewer than 100 students, preferably fewer than 80; as a practical matter, the abler and more experienced teachers would have more authority than the less able and the inexperienced.

Other Roles

Other reports focused on the role of the states and added some words on the role of the federal government.

Action for Excellence, the report of the Education Commission of the States, called for a state plan of action to improve education, to be developed under the leadership of the governor in collaboration with state legislators, state and local boards of education, educators, business leaders, and others.

In addition, each local district would be called upon to develop a school improvement action plan, focused on education for jobs and growth, with specific local objectives, timetables, and methods for measuring progress in local schools.

A Nation at Risk, *High School*, *Action for Excellence* and of course *Making the Grade* made recommendations concerning the federal role in education. Each urged the federal government to maintain a commitment to assuring equity in education and to providing for the needs of special populations such as the handicapped, the educationally disadvantaged, and the gifted and talented.

A Nation at Risk also suggested that the federal government should guarantee constitutional and civil rights in the schools, perform and support research and collect data, support teacher training in shortage areas, and provide student financial assistance and research and graduate training.

Also discussed in some of the reports is the need for parental and community support of school improvement efforts. *Action for Excellence* and *High School* called for collaboration between schools and businesses to improve education and the link between schooling and employment.

CHAPTER 9

The Unattended Issue: Vocational Education

Vocational educators complained that they were all but ignored in the national commission reports on education. There was no discussion of how the elevated standards and academic emphasis recommended by the reports would square with the underlying rationale for occupational training in public secondary schools, namely, that vocational education is a useful alternative for students who lack aptitude for or interest in academic programs.

The Paideia Proposal was criticized particularly for its out-and-out rejection of vocational education in a proposed academic curriculum for all students; but even the economic development-oriented *Action for Excellence*, the report of the Task Force on Education for Economic Growth, did not address itself to vocational education as a goal of reform.

The omission was remedied in late 1983, when a Committee on Vocational Education and Economic Development in Depressed Areas, writing for the National Research Council of the National Academy of Sciences, at the request of the U.S. Department of Education, issued a report titled *Education for Tomorrow's Jobs*.

The committee's mandate was to undertake "a study of collaborative efforts among business, industry, and community-based organizations and the public sector in the vocational education of residents"; but early in its deliberations the committee concluded that it would address vocational training in general, not just in depressed areas, and would confine its study to vocational education in comprehensive public high schools, where the committee saw the most serious problems.

The chairman of the committee, Dean of the School of Business Administration at Dartmouth College Colin Blaydon, noted that "the committee began its deliberations [in October 1981] in an atmosphere of concern about the national economy" and completed its work two years later "in an atmosphere of concern about the state of the American education system."

"The current circumstances provide an opportunity for actions to be taken that can have fundamental and long-term effects on the education system. It is in this setting that we put forward the analysis and recommendations contained in this report," Blaydon said.

Vocational educators took immediate comfort from one of the committee's suggestions for change, though the committee made clear that what it proposed would be "virtually impossible to legislate or institute." Specifically, the committee members said, "We would like to see vocational education become an equal partner with college-preparatory education in the education system as a whole. The most effective vocational programs are deserving of that respect now, and we would like to see all programs raised to that level of quality and esteem."

Less eagerly seized upon were the committee's findings about the programs it observed in public high schools in general, which displayed "extreme unevenness" in the provision of good voc ed and persistent exclusion of minority and other disadvantaged students from the best programs.

The Structure of Vocational Education

In the United States, vocational education policy is highly decentralized, and decisions are made at many different points in states and local communities. That makes vocational education a confusing mixture of programs and governance, but it could also be a source of strength, allowing flexibility and adaptation in some parts of the system "even if others remain sluggish and slow to respond," *Education for Tomorrow's Jobs* observed.

The best known and most common voc ed programs are those in comprehensive high schools, but vocational education also goes on in specialized vocational high schools, regional technical institutes, area vocational centers that students attend on a part-time basis, junior and community colleges, proprietary schools, regional occupational centers, on-the-

job training programs, and apprenticeships.

Altogether, almost 28,000 public and private institutions across the country offer vocational education, the report says. About 60 percent of the secondary schools offering five or more vocational programs are located in areas with populations under 100,000, although only about 27 percent of the population lives in such areas.

It is not safe to conclude from that, however, the report cautioned, that small towns and rural areas are oversupplied with vocational schools and centers.

In fact, residents in those regions generally have access to training for only a very limited number of occupations. "Vocational education, because of its demands for relatively high expenditures and for flexibility to adapt to the changing labor market, is extremely limited in rural settings," the committee said.

In cities, the problem is different but may be equally acute. The existence in many metropolitan areas of specialized vocational schools which draw students from several school districts, often by competitive examination, is a factor in the deterioration of vocational programs in comprehensive high schools, which can lose both revenues and well qualified students to the alternative programs.

In inner cities, as indeed in all locations across the country, the report found comprehensive high schools having more trouble than any other vocational institutions, secondary or postsecondary, in keeping abreast of technological change and the shifting labor market, with the problem in inner cities complicated by decay and disruption in many schools.

Teaching in Vocational Education

In 1978, according to the report, there were 354,000 vocational education teachers in the United States, at the secondary, postsecondary, and adult levels. That figure represents an increase of more than 50 percent from 1972, reflecting the growth of occupational programs and their enrollments in that period.

The single most important difference between high school and postsecondary vocational programs is that postsecondary schools can hire people who have gained their occupational training in business rather than the classroom.

"This is generally viewed as an option that should be available to high schools, a view the committee shares," says the report. "We believe there should be university-based training for teachers, but we believe that allowance should be made for other types of training, particularly occupational training or experience in the workplace."

Completion of a bachelor's degree in education "may be largely irrelevant to vocational education programs," the report concluded.

The report also cited tenure as a particular concern for vocational education, saying tenured teachers are less likely to be willing to change their programs to reflect changes in the workplace. "Seniority, especially as a factor in deciding who is fired in a reduction of the teaching force, contributes to the problem of keeping vocational education teachers current in their occupational fields."

The report recommends that teacher training institutions develop special "short, effective" curricula "aimed at teaching practices in a wider variety of instructional settings than in many other education programs," for people who have gained most of their knowledge and experience through employment and not in college.

The committee also proposes changing certification requirements to allow school administrators to hire part-time vocational teachers, probably from industry, also an option available to colleges.

Financing Vocational Education

Capitation funding formulas for vocational education limit the ability of school administrators to put together enough money for expensive retooling of vocational education facilities, the Academy committee found. Ideally, the formulas should take account of the costs of capital equipment, as well as instructional costs; indeed, for funding purposes, vocational education might well be viewed as more similar to university research programs than to other secondary education.

The extreme variability which the committee observed in the costs of vocational education appeared to result from the need to add or update equipment. As an alternative, schools should look at short-term leasing of equipment or borrowing from business, and statewide pools of equipment that reasonably can be shared might be created, the report suggested.

The report clearly sees money as a primary issue in correcting the problems it observed in public secondary school occupation education: "If public schools are to accomplish the goal of providing up-to-date and effective vocational education for all students who want it, they should have sufficient resources not only to maintain the good programs they now have but to modify existing programs and initiate new ones to teach the skills required by employers."

The report does not doubt that this is a good way to spend money.

Improving Access To Vocational Education

One conclusion seemed inescapable to the committee: the better the vocational program, the less

likely that disadvantaged students will have access to it.

The report cites reasons ranging from geographic location (vocational centers are often distant from center cities where poor students live or in rural areas with poor transportation) to competition for admission (which favors better prepared students) for what it described as almost systematic exclusion of the disadvantaged students who presumably need training most.

The committee considered two plans to give economically disadvantaged young people access to high-quality vocational programs, after the committee concluded that those youngsters were often excluded because all places in good programs were filled by better qualified applicants, and program managers had no incentives to provide remedial education.

In one plan, the committee suggested that students between the ages of 14 and 18 be given vocational incentive grants, patterned after the basic education opportunity grants available to low-income college students, to be spent for vocational training in public or private schools of their choice anywhere in the country, at any time during their four years of eligibility.

The grants would have a maximum value of 100 to 120 percent of the national average expenditure per student in secondary vocational education programs. The amount paid to an accredited institution would be in addition to whatever funding the school normally received from other sources, an arrangement that would give a slight edge to public schools, since they'd get both supplemental payments and their regular public funding.

The Academy committee noted that one of the objectives of incentive grants would be to promote competition and entrepreneurship in vocational education. "Private and public schools alike would compete to enroll students, presumably by strengthening their programs and by actively recruiting to enroll students with such grants."

That would raise questions about consumer protection—students shouldn't waste their grants and time on ineffective programs. The committee's answer is "truth in training," which it said would be relatively easy to implement, since vocational educators are accustomed to evaluating their programs in terms of completions and placements of students in jobs, plus employers' views of the training.

As proposed by the committee, truth in training would work this way:

▶For programs that have been in existence three or more years, evaluation should include data on enrollments, completions, placements, and beginning wages. On request, potential applicants for the programs would be given addresses and telephone numbers of personnel offices of firms that have hired graduates.

▶For newer programs, the materials given to prospective students would include as much of that kind of information as possible, but would also include a thorough prospectus describing the skills to be taught, the types of training and work experience, the expected size of the job market, minimum academic qualifications required of students, and the training and experience of the faculty.

The committee's second model for improving access to vocational education is adapted from the approach now used to design education programs for handicapped children.

It calls for an individualized vocational education program for any student who asks for it, specifying objectives for both basic skills and vocational education, and the programs through which the objectives could be met. To the extent that the objectives could not be met by the local public school, arrangements could be made to use other resources, public or private.

The committee said that of the two proposals, it has more confidence in the practicality and effectiveness of vocational education incentive grants, and therefore recommended them more strongly. It also predicted, however, that the voucher/grant idea would meet "strenuous opposition within the education community."

'Optimism and Grave Concern'

The Academy committee concluded its discussion of education and training for employment "as others who have studied education have done—with a mixture of optimism and grave concern."

"We believe we know what is important for vocational education students: mastery of the basic educational skills, exposure to a variety of occupations, mastery of the basic occupational skills, adoption of appropriate work habits, and participation in well-supervised work experience that is closely related to the school studies. Like others before us, we believe we know success when we see it, but we have no formula for making all programs successful."

"From our reviews of vocational education programs and other employment training programs and from our collective experience with various aspects of such programs, we conclude that fundamental changes are needed to improve some vocational education programs to a significant degree. Those programs generally regarded as being most in need of improvement are often in public comprehensive high schools ...."

Education for Tomorrow's Jobs refers to the reports of the National Commission on Excellence in Education, the Twentieth Century Fund, and the Task Force on Education for Economic Growth as agree-

ing that basic skills, including ability to read with understanding, write clearly, listen effectively, and perform basic mathematical computations, "should be taught to students in elementary and secondary schools and that a high school diploma should signify competence in these skills."

The report deplores the fact that "many young people lack the skills so often required in entry-level jobs." It also says that "All students ... should be prepared to reenroll in education or training programs as necessary throughout their lives in order to update their job skills."

The Same Competencies for Work and College

In May of 1984, a second National Academy of Sciences panel reported on the role of vocational education in preparing students for employment.

A Panel on Secondary School Education for the Changing Workplace, chaired by E.I. duPont de Nemours and Company Chairman Richard Heckert and composed primarily of executive officers of American corporations, concluded that high school graduates who go directly to work after graduation need virtually the same academic competencies as those who go on to college.

The panel concluded that vocational education is no substitute for thorough grounding in fundamental knowledge and basic intellectual competencies needed for learning and advancement throughout a working lifetime, and said the "core competencies" must always come first during the high school years.

The panel said its single objective was to identify, from the employer's point of view, "the basic education needed for effective, upwardly mobile, lifelong participation in the American work force."

Given this highly focused charge, the panel asked its employer members to describe the employees they will need, and will be able to employ, in coming years.

Without exception, the employers identified one characteristic: they want employees who are able and willing to learn throughout a working lifetime. That translates, the report said, into "A person who ... is well grounded in fundamental knowledge and who has mastered concepts and skills that create an intellectual framework to which new knowledge can be added."

Yet it is precisely in the basic intellectual skills that young employees show the greatest deficiencies, according to the report.

"Many lack the ability to draw correct inferences from written, pictorial, or mathematical information; to understand oral instructions; to develop alternatives and reach conclusions; to express their ideas intelligibly and effectively; and to apply such basic concepts of economics as profit and cost."

"All of these skills are important, even in entry-level jobs. Advancement to more responsible posts requires skills of an even higher order, including the ability to compose tables and reports, to consult reference and source materials, to apply mathematical concepts and procedures, to control complex equipment, and to address groups."

The panel concluded that the competencies needed to prepare a young person for an uncertain employment future are the same ones that are the basis for all high-quality education and include:

- *the ability to read, write, reason, and compute;*
- *an understanding of American social and economic life;*
- *a knowledge of the basic principles of the physical and biological sciences;*
- *experience with cooperation and conflict resolution in groups;*
- *possession of habits that make for a dependable, responsible, adaptable, and informed worker and citizen.*

The panel's report, *High Schools and the Changing Workplace: The Employers' View*, stresses that it is not talking about minimum competencies but about goals, which everyone should strive toward, though some students will attain higher levels than others. It also concedes there is nothing new about its competencies, and that many educators feel they form the core of the high school curriculum already.

"If that is so," the report says tersely, "then something is slipping through the educational process."

Charting a Course: Observations on the Education Reports

By Robert Hampel

The reaction against laxity was a major theme of the early 1980s commission reports on education. In spite of the persistent public anxiety about order and control, few reports spoke directly to those concerns. There was a "get tough" spirit, but in respect to academics.

Longer school days, longer school years, more homework, fewer electives, stiffer graduation requirements, and higher college entrance standards led the lists of crack-down reforms, to be imposed on local schools by state law. Nervous comparisons to diligent Japanese students dramatized the danger of softness—the lazy will get left behind in the race for technological superiority.

America's survival will be "at risk" unless state legislatures insist on quantifiable standards and demonstrable competencies, a national commission warned. The rhetoric was more sophisticated than the minimum competency testing pleas of the mid-1970s, when minimums had a way of becoming ceilings rather than floors. But the underlying sentiment was similar—no more nonsense—as was the implication that standards and standardization are one and the same.

Rhetorical flourishes about honoring the commitments to equality forged in the 1960s and 1970s accompanied the crusade for quality.

A College Board pamphlet captured the twin objectives with its clever title, "Project EQuality," promising excellence and equality in full measure for all. Mortimer Adler's defense of Socratic dialogues vowed to avoid "abominable discrimination."

No one could suggest that commitment to achievement might in practice lessen not promote equality, that higher hurdles might slow rather than speed the disadvantaged. Cheerleaders did not dwell on tough problems like the Hispanic immigration. The early 1960s interest in compensatory education for minorities is not a prominent theme of the reports; bilingual education is so controversial that most commissions took no position on that volatile issue.

Almost no one discussed the fate of students unable to meet harder graduation requirements, or considered how funding the new priorities would affect the multicultural programs cherished by many schools. On the other hand, several major reports described and deplored the persistence of *de facto* tracking, which closed college doors for vocational students without giving them enough skills to secure good jobs.

Higher order reasoning skills were expected of all. As the College Board said, "We will all be well served if educational excellence can be made possible, not just for the few, but for all students." Equality was often defined in terms of exposure to and participation in quality academics.

Meritocratic attitudes also marked the proposals for differentiated career ladders for teachers. Instead of salaries tied to seniority and number of graduate course credits, the idea of master teachers and merit pay received unprecedented attention.

The low test scores of prospective teachers underscored the need to try to reverse the social demotion of teaching as a career. The campaign for excellence would be doomed if the new recruits were not academically talented, but smart students knew that teacher starting salaries were low.

In Indiana, the average 1982-83 entry salary was $12,048; a family of three earning $14,360 qualifies for reduced-price school lunches. In Indianapolis, the 1982 starting teacher salary was $3,604 less than the pay of a novice painter in the schools.

Many reports linked merit pay and higher starting salaries with tougher teacher education in order to upgrade the quality of new staff—but only a few raised the volatile topic of state certification laws which preclude recruitment of the sharp but uncredentialed candidates wooed by the private schools. Furthermore, the salary issue overshadowed the related matter of terminating the incompetent, which everyone in the field quietly agrees is a terrifically difficult process. Transfers are much easier to se-

cure than dismissals. Staffing, as one administrator said, is "like playing Old Maid; you know, you pass off all your bad cards." Her principal agreed and asked, "Can you think of running General Motors or Ford or Sears this way?"

In the past, the problem of teacher supply was periodically finessed by economics (in the Depression, teaching was relatively secure because of rising enrollments), or by sexism (hiring single women, underpaid, to overemphasize virtue and propriety), or by war (draft exemptions for male teachers in the 1960s). Above all, steadily rising enrollments promised job security, which strongly appealed to many lower middle class candidates whose parents worked erratically during the Depression.

In the 1970s, declining birth rates and wholesale layoffs transformed teaching from a stable to a precarious career. Moreover, the swift expansion of colleges in the 1950s and 1960s raised the percentage of adults with degrees; indeed, the college graduate of 1970 had the same social status as the high school graduate of 1940. It is unlikely that better pay will return teachers to their early 20th century stature, when some were even addressed as "Professor." Even if their economic position improves, the old educational differential teachers enjoyed will remain a thing of the past, which is a reminder that changes affecting teachers are inextricably related to transformations in the wider world over which schoolpeople have little if any control.

Encouraging merit in the front office is another common contemporary reform theme. The 1970s literature on effective schools stressed what practitioners knew all along—good principals are crucial. The exemplary principal should be an instructional leader, a headmaster, rather than a harried bureaucrat. The recent reports occasionally suggest more staff participation in decisionmaking, but the old hierarchical organizational models remain.

Everyone solemnly agrees that change is impossible without teacher involvement, but the major decisions will still be made in the front office. The power wielded by college faculties is unlikely to characterize the high schools, notwithstanding the sensible cries for more collegiality and interdepartmental contact.

The schools the principals will run should be leaner places, according to many reports. *High School* and *A Place Called School*, written independently, both titled their chapters on school purpose "We Want It All," and argued that we should not.

The high school should stop trying to be all things to everyone. Unprofitably burdened with too many tasks, high schools should set priorities that focus energy and attention on academics. There was much denigration of the "smorgasbord" curriculum, unflatteringly compared with the alternative of a sit-down dinner with little if any choice of menu. In particular, vocational education should not be a featured entree.

A retreat from comprehensiveness would also foster smaller schools. In 1959, Conant fixed 400 students as the minimum for a decent four-year school; in 1983, John Goodlad took the same figure as optimal. What is rarely discussed is whether small school intimacies will be a means to or a break from the rigorous demands of a more academic curriculum.

If successful, the less-is-more movement will be a major change. In the 1970s, declining enrollments and budget cuts forced some systems to retrench, but few did so cheerfully or creatively. The expansiveness of high schools is deeply rooted. A broad curriculum serves many institutional (if not intellectual) needs; it accommodates student diversity, gives teachers some variety, helps public relations, brings in public funds and private grants, and justifies administrators. In light of that heritage, at least some high schools may insist that old and new priorities are perfectly compatible.

Uninspired instruction was an important concern of several critics keen on changing teaching methods. Relying on lectures, worksheets, questioning for monosyllabic factual answers, and talk that abandoned the material for nonacademic chatter often overshadowed analysis and discussion, according to several studies. Teacher-dominated work maintained order (and energy) at the expense of lively (and exhausting) intellectual dialogue.

"Most teachers simply do not know how to teach for higher levels of thinking," John Goodlad grimly concluded.

To improve matters, Mortimer Adler's book defended a new school schedule flexible enough for small sections devoted to personalized coaching, Socratic-style seminars, and large group meetings for lectures. The books by Goodlad, Ernest Boyer, and Theodore Sizer also spoke to the importance of developing a more versatile pedagogy, not an easy task in light of the enormous problem of retraining an aging teaching force. Their work highlighted life inside the classrooms. They challenged the premise of panels such as the National Commission for Excellence that quantitative change, such as another year of math, would necessarily produce the more meaningful qualitative changes.

Points of disagreement notwithstanding, the current reassessments, taken together, have some similarity to previous periods of criticism.

Bursts of report-writing usually follow periods of relative quiet. The pace of publication has not been constant since 1940. There were peaks, in terms of volume and influence of reports, in the mid-1940s (*Education for All American Youth; General Education in a Free Society*); in 1953-59 (from Arthur Bestor to Conant); in the late 1960s and early 1970s (beginning with individual exposés, ending with several panel

reports); and in the early 1980s.

There was never silence in the intervals, but most of the activity was in-house tinkering and fine-tuning: life-adjustment projects in the late 1940s, curricular experiments in the early 1960s, and optional programs of the mid-1970s. The preceding reports legitimated and catalyzed much of that work, but the major reports did not by themselves initiate the major changes. (Progressive experiments began before 1944; science, mathematics, and foreign language enrollments rose before Sputnik; flexible scheduling predates the endorsements of alternative programs.)

A second parallel is in the tone of the reports. *A Nation at Risk* sounded the alarm by invoking a forumlaic rhetoric of crisis, with sentences like, "If an unfriendly power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war."

It is noteworthy that the Commission selected the title after finishing the text. The working title was a drab *Education and the 21st Century*, which lacked the immediacy to capture public attention and convey the urgency of their message. A more dramatic title would provide "originality."

The final title did indeed draw attention, but it was hardly original. Previous writers, too, had shouted warnings from the watchtower.

Book titles like *Our Children Are Cheated, Quackery in the Public Schools, Death at an Early Age, Crisis in the Classroom,* and *The Literacy Hoax* were examples of earlier cries of emergency. The exact nature of the crisis differed from author to author: the anti-Progressives singled out the pernicious theories of education school professors; Charles Silberman pinpointed the stultifying mindlessness of classroom instruction. Some observers deplored the process, others faulted the results; some related international security to education, others claimed domestic strength was imperiled.

Whatever their differences, most crisismongers, then as now, depicted a decline from a better past. Their books memorialized supportive parents, stricter discipline, rigorous standards, and better educated graduates. This appeal to a sense of loss, cast in the style of a colonial sermon, played to the American fondness for history as nostalgia.

Furthermore, the language of crisis was a political strategy, most frequently voiced by nonscholars eager to bring about change. The books by journalists, admirals, university presidents, school board members, and ex-teachers were not dispassionate descriptions grounded in years of meticulous research. Often they were partisan interpretations—and in the 20th century, crisis rhetoric has been a staple of political language.

In education, the crisis rhetoric tries to jar the complacency of people unconnected with schools, who care little about Socratic seminars and resist higher taxes to boost teacher salaries. (Indeed, for many of the current curricular reforms, there is no clearly identifiable—let alone mobilized—constituency.) During the stormiest years of school desegregation, for example, the percentage of people aware of the racial composition of the nearest high school fell rather than rose. The crisis rhetoric tries to rouse the sluggish, but rarely lets on, as Conant told President Eisenhower in 1959, that apathy itself is a form of crisis. That might insult the very audience one is trying to woo.

One group the reports, then and now, rarely try to court, or even to understand, is the students.

Too often, the reports appear to assume that students will gratefully embrace interesting and useful new programs, whether core courses, PSSC physics, work-study, or higher graduation requirements. Too often, data from questionnaires on future college and career plans is the extent of the student input. This is not to say that adolescents should dictate curriculum reform, but it is striking that so few reformers have tried to probe the habits and allegiances which can subvert well intentioned change.

Students care most about athletics, popularity, television and music. When asked what they liked best about high school, students chose "nothing" more often than either "teachers" or "classes I'm taking." Within the curriculum, they enjoy art, gym, and vocational classes more than the sedentary academic courses.

This situation is not entirely new. In the late 1950s, another period of adult crusading for academic rigor, the career fantasies of students had little to do with the life of the mind. Girls preferred modeling, and boys wanted to be famous athletes.

Any strategy to encourage academic excellence might at least take account of student preferences, and consider whether to ignore or challenge those customs. The state legislature may mandate eight years of math and science, but if the P.A. announcements continue to interrupt classes to remind everyone of the afternoon pep rally, more emotional investment in calculus or chemistry is unlikely.

Rock star Frank Zappa once said that high school is a state of mind. In teenage minds, what matters is not the tough curriculum defined by recent reports. Being with one's friends is as central as anything to students. There is evidence that friendship groups are more fragmented now than the former in/out dichotomy, but most commissions do not address that change.

Ethnography as well as survey research suggests that students today feel less self-confidence and self-esteem than their counterparts 20 years ago, and there is also evidence of a curiously low-affect style in contemporary adolescence (illustrated nicely by a

New York Times survey in which 20 percent of the respondents said they did not know why they smoked marijuana). It may be that the irreverence of the past has given way to the irrelevance of high school, as in "Fast Times at Ridgemont High," a movie in which the action occurs in shopping malls, swimming pools, and bedrooms more than in classrooms.

What is not at all clear is that another required course will increase students' investment in their work, or decrease their fascination with the curriculum of television, with its insidious combination of over-stimulation and passivity.

If there are some similarities between past and present periods of high school reform, there are also several major differences. The authors of the literature of reform in the last 20 years have had more contact with and experience in the high schools (despite the neglect of the student culture in their reports) than did their predecessors.

In the mid-1940s, the commissions that drafted *Education for All American Youth* and *General Education in a Free Society* were elite groups whose principal teaching experiences were in universities. Only a minority of the Educational Policies Commission were practitioners, and the General Education sessions devoted more time to abstract discussions than to listening to testimony from schoolpeople. In fact, at one meeting Professor Howard Mumford Jones berated his colleagues, asking when the members of the committee were going to visit a secondary school, which he said was where the problems were.

In the 1950s, professors such as Arthur Bestor and Jacques Barzun wrote about schools, but so did indignant school board members, Admiral Rickover, Conant, and others. Some of the writings relied on experience, but school visits like Conant's were the exception rather than the rule. Ridiculing an article from an education journal was more common than classroom observation.

In the 1960s, voices from the inside reached an attentive audience. On the one hand, journalists like Fred Hechinger, Martin Mayer, Charles Silberman, and Peter Schrag described flesh and blood teachers. Their books were full of poignant vignettes, deftly stroked etchings of many schools rather than portraits of a few, and their reportage offered a range of useful insights rather than sharply focused interpretations. On the other hand, teachers also spoke, often bitterly, of their frustrations and disappointments.

Autobiographical testaments from John Holt, George Dennison, James Herndon, Jonathan Kozol, and others described stultifying urban bureaucracies but also celebrated the heroics of idealistic staff brave enough to battle conservative administrators to create places of learning and joy in otherwise bleak institutions.

Recently, the major statements have drawn more extensively on, and contributed to, scholarly research. In the early 1970s, several panels of experts issued reports which tapped historical, economic, and sociological data. At the same time, federal funding for evaluation studies of pilot projects began to balloon the size of the empirical literature. Ethnographic field work, in particular, became more acceptable and widespread.

The careful ethnographies came to command more respect than journalistic reportage. The recent Boyer, Goodlad, and Sizer studies relied on observations and interviews rather than one-shot testimony from outside consultants. Even Mortimer Adler's panel followed their manifestos with implementation work in several school districts; 40 years ago, their first book would have concluded rather than begun the project.

These large-scale investigations marked more than the maturation of educational research as a legitimate field: they also signalled a faith that prominent insiders could also be trustworthy critics. It is hard to imagine in the 1950s an education school dean like John Goodlad in charge of empirical research designed to lead to consequential reform. The fear of apologetics and cover-up has become less prevalent.

Alongside these shifts in research design and personnel (but only partly explained by them) is the waning concern with education as an instrument of social design. Commentators now make smaller claims for the social impact of educational reform. The focus on achievement does promise a competitive edge against rivals, but no one touts stiff graduation requirements as the solution to problems such as racism. Whatever enchantment exists is mostly a "romance with utilitarianism," as the head of the Council for Basic Education said.

Whether or not educational reform connects with grand visions of social change, any redirection of secondary education will be hard to achieve. In a society keyed to organized interest groups, there are bound to be howls of protest from all the factions slighted by the current emphasis on educational excellence.

Orderly schools, disciplined schools matter more to many people than intellectually exciting schools, and therefore change, which is not usually tidy and orderly, has occurred, and probably will continue to occur slowly and unevenly.

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Charting a Course: Observations on the Education Reports

By Marshall Smith and Lawrence Stedman

An important contribution of the commissions is that they have not resorted to elitist solutions. They have not, as they very well might have, proposed extensive adoption of gifted and talented programs, or the introduction of specialized math and science programs for the academic high achievers.

Instead, they have proposed a redefinition of the basic skills, consisting of an expansion and upgrading of the fundamental abilities schools should impart; and at least three of the four commissions argued that the goal of the reforms is not to train an academic elite but to raise the performance of the average student.

The National Commission on Excellence, for example, called for a "high level of shared education" and commented, "We do not believe that a public commitment to excellence and educational reform must be made at the expense of a strong public commitment to the equitable treatment of our diverse population."

The Task Force on Education for Economic Growth stated, "We must improve the quality of instruction for all students—not just for an elite, but for all; and The Twentieth Century Fund task force proposed, "The skills that were once possessed by only a few must now be held by the many."

The College Board's focus was confined to the preparation of students who plan to attend college, but their project has emphasized expanding opportunities for minorities.

Yet, even though the rhetoric is egalitarian, the analysis and the recommendations failed to address the needs of the poor, the minorities, and inner city youth. Strategies to encourage dropouts to remain in school, for example, were not considered by three of the commissions, and were treated superficially by the fourth. The commissions also failed to deal with the problem of enticing good teachers to work in the inner cities and overlooked the desperate lack of employment for many inner city youth. The Twentieth Century Fund task force did propose extending federal compensatory education programs for poor, low-scoring, and handicapped students, but their attention was slight.

The recommendations can be grouped into four categories: leadership, time, content, and teachers.

There are two major omissions in the recommendations.

The first is that, while the commissions were extensively concerned with content and time—that is, "What is taught?" and "For how long?" they ignored the problem of pedagogy—namely the question, "How is it taught?"

The second is that the commissions failed to consider the implications of their recommendations, particularly the difficulties that would attend their implementation, and the ramifications of adopting them.

We can understand why these aspects were omitted: the commissions felt the reports needed to be short and simple to reach a wide public. Details might have distracted attention from the major message—that the education system had reached a crisis point—and might have drowned out the reform suggestions. Also, by avoiding prescriptions or specifics, the reports leave local school systems and states free to make their own decisions about how to handle the recommendations, in light of their particular circumstances.

Nevertheless, the failure to include even the briefest analysis of what the policy recommendations would entail weakens the arguments. Practioners, in particular, will consider many of the suggestions unrealistic.

For example, the National Commission on Excellence in Education recommends a 200- to 220-day school year. At first glance, lengthening the school year seems a reasonable suggestion—many foreign nations have academic years of this length—and increased time should improve student achievement. But lengthening the school year by almost a quarter would pose such practical difficulties that the sug-

gestion seems unworkable.

For example: Substantial amounts of new curriculum materials would have to be developed. Also, since it is highly unlikely that *all* school systems would accept, or be able to afford, the longer year, what happens, in a mobile society, when students move from one district to another?

As states have already found, teachers have to be paid more, under most collective bargaining agreements, if they work longer. Where is the money to come from, and what will be the unions' position? And finally, what, exactly, would be the effect on students?

It also seems appropriate to take note of the top-down flavor of almost all the recommendations, which seems more in line with West European school systems in which the central government controls education. In such systems, the problems of articulation, cost, and side-effects are part of a national planning process when major changes in the system are contemplated. Here, on the other hand, those making recommendations and those setting policy are not responsible for implementation and can't easily be held responsible for failure.

Leadership

The commissions differ as to the proper source of leadership for reform.

The National Commission on Excellence believes (as does the Twentieth Century Fund Task Force) that the federal government has primary responsibility for identifying the national interest in education, including providing some resources, research, and support for special groups (handicapped, minorities, etc.), but that it is the states and local school systems that have the responsibility for implementation.

In this, they are not as specific as the Task Force on Education for Economic Growth, which directs governors to take the leadership role, creating state plans and statewide task forces that include business leaders, to promote reforms. Local efforts would be guided by business/school partnerships and by principals acting as instructional leaders within the schools.

The College Board recommends that colleges and secondary schools carry out its proposals for strengthening high school curriculum and college entrance requirements. How these various sources of leadership are to coordinate efforts is unspecified.

Also ignored, except in the passing reference to principals, is the growing conviction among effective schools researchers that leadership in education improvement must come from school-site management: that school staffs must be given the responsibility to construct their own reform efforts, to develop their own plans, to change their own programs, albeit within a framework established by local, state, and federal government.

Even the important involvement of parents and community groups goes unmentioned, though the National Commission does have appendices directed to students and parents urging greater attention to academic endeavors.

Finally, there is little recognition of the political ramifications of the leadership sources. This is particularly true of the Task Force on Education for Economic Growth.

How closely, for example, should business work with schools? The issue is not only one of vocational education, of keeping dropouts in school longer, or of making the curriculum relevant to the workplace; there is also an issue of how much influence private interests should have over a public institution. Through team teaching by industry specialists and public school teachers, classes taught in offices and factories, and a host of other cooperative efforts, business stands to receive major benefits from *public* training of future employees, and is in a position to influence the nature and direction of the curriculum.

Action for Excellence calls for transmission by the schools of two economic competencies: "the ability to understand personal economics and its relationship to skills required for employment and promotability, the ability to understand our basic economic system (*e.g.*, profits, revenues, basic law of supply and demand, etc.). Can one doubt that with involvement of the business community in school, "promotability" and "our basic economic system" will be defined in terms of corporate values rather than social responsibility?

The danger of such an arrangement is suggested in the historic battles against vocational tracking and industrial education. All of us recognize that education is more than the production of human capital, but this recognition is obscured when the commissions focus on training students for a high-technology future, or call for reform to be guided by task forces promoting economic growth.

Time

The issue of time was not raised at all in two of the commission reports, those by the College Board and the Twentieth Century Fund. The other two commissions made very similar recommendations, calling for longer school days, improved attendance policies to reduce absenteeism, increased homework, tougher grading, more order and strict and fair discipline, and frequent testing. In this respect they appear to be calling for both increased time and better use of time. The National Commission on Excellence recommended lengthening the school year to 200 or 220 days; the Task Force on Economic Growth made no such proposal. The Commission

also called for placement and grouping of students by performance, not age.

In one recommendation, one of the commissions did move beyond simply stating the need for an effective policy and described what might be entailed. On the issue of attendance, the Task Force on Economic Growth recognized that the problems of absenteeism and dropout are linked to the curriculum and to students' alienation. They called for revitalizing the curriculum to retain such students.

But even here their call raises more questions. What is meant by revitalizing the curriculum? Does this differ from their main recommendation to make the general program more academically demanding and the environment more disciplined—changes which might well increase the dropout rate?

Finally, there are the recommendations for longer school days and longer school years. We are impressed, as many are, that the average Japanese high school student will at graduation have spent the equivalent of four years more in school than his American counterpart.

While we would agree that increasing academic time should somewhat raise achievement, we would argue that time is not *the* crucial element in higher achievement. More important seems to be the coverage of content. This factor, and various other pedagogical and cultural elements in Japanese schools and society, are more likely the major determinants of high Japanese achievement.

In addition, the most recent analyses of the "time" prescription recognize that quantity is a relatively minor variable in the production of achievement, compared to quality—*i.e.*, how time is used. Karweit, for example, in a background paper prepared for the National Commission, concluded that "present studies of time and learning, contrary to widely publicized statements, have not produced overwhelming evidence connecting time-on-task to learning . . . . it is what is done in time and how appropriate it is that affects the learning that takes place."

Content

All four commission reports propose strengthening the curriculum and increasing the requirements. They all ask for improvements in mathematics and science, and stress English literacy. Three emphasize work skills, two mention study skills, three call for increasing graduation requirements, three stress computer competency, and three urge greater competency in foreign languages.

Unique are the National Commission's proposal that textbook publishers be required to demonstrate the effectiveness of their books; the Task Force on Economic Growth's emphasis on expanding programs for the gifted; and mention by the College Board of the arts as an essential component of the curriculum. (It is worth noting that only the Board issued a strong statement of the need for strengthening humanistic aspects of the curriculum.)

Although the reports say they are calling for "new" basic skills, the descriptions of the "strengthened" curriculum read very much like current curriculum goals. The National Commission on Excellence, for example, proposed the following objectives for three important subjects:

In *mathematics*, students should "understand geometric and algebraic concepts, understand elementary probability and statistics, apply mathematics in everyday situations, and estimate, approximate, measure, and test the accuracy of calculations."

In *science*, the curriculum should include "the concepts, laws, and process of the physical and biological sciences; the methods of scientific inquiry and reasoning; the application of scientific knowledge to everyday life; and the social and environmental implications of scientific and technological development."

Social studies should "enable students to fix their places and possibilities within the larger social and cultural structure, understand the broad sweep of both ancient and contemporary ideas that have shaped our world; understand the fundamentals of how our economic systems work and how our political system functions; grasp the difference between free and repressive societies."

Apart from the obvious problems involved in reaching agreement on what some of those mean (consider the last, "grasping the difference between free and repressive societies," in relation to the debate about U.N. Ambassador Jeanne Kirkpatrick's distinction between totalitarian and authoritarian regimes), few high school math, science, or social science teachers would find anything novel in these description.

The Task Force on Economic Growth and the College Board did not propose specific numbers of years for each subject, but rather listed competencies that should be acquired in a number of areas, including speaking and listening, writing, reading, mathematics, and science. Many of these are also the expressed goals of current secondary schooling. Many high school English curricula, for example, already have as their goals the following writing competencies proposed by the Task Force:

the ability to organize, select and relate ideas and to outline and develop them into coherent paragraphs;

the ability to write standard English sentences;

the ability to improve one's own writing by restructuring, correcting errors and rewriting;

the ability to gather information from primary and secondary sources, and to write a report using this research, and to cite sources properly.

On the issue of how we can ensure that classes are so organized that students actually acquire these skills, however, the reports are silent. Given the his-

torical failure of schools to transmit to students the abilities described in their objectives, it seems to contribute little to restate the goals.

We might all agree, for example, with the College Board's assertion that foreign language competency should involve ability "to ask and answer questions and maintain a simple conversation" and "to pronounce the language well enough to be intelligible to native speakers"; and we might also agree with the contention that four to six years of study, at least two of them in high school, are needed to achieve this level of ability.

But given the dismal performance of American schools in producing language fluency, these recommendations are hardly enough. On the basis of present evidence, we cannot be at all sure that increasing the years spent in language study would be beneficial, without a major reorganization of the way foreign languages are taught. It could even be detrimental. It might be better to spend the money sending students to foreign countries for a summer or a semester.

Teachers

Silent on pedagogy, the commission reports suggest only one way to improve the quality of teaching, and that is to improve the quality of teachers.

Their critique of teacher quality centers on five factors: the low test scores of student teachers relative to college majors in other professional areas; concentration in teacher preparation programs on methods at the expense of subject matter; the low salaries paid teachers, as compared with other comparable occupations; shortages of teachers in critical areas such as science and mathematics; and the use of unqualified persons as teachers, particularly in shortage areas.

Each of the factors, however, has a side which is not mentioned in the reports.

(1) Teachers historically have had low test scores relative to other majors, but studies have shown only a tiny relationship between the standardized test scores of teachers and student achievement. In addition, since low teacher scores are a long-standing phenomenon, it is hard to relate them directly to sudden drops in student scores, such as those on the Scholastic Aptitude Tests (SATs) in recent years.

(2) In most teacher education institutions, students preparing to teach at the secondary level must major in their academic subjects in addition to taking the required courses in methods of teaching. Sometimes they must take even more courses in their subject areas than other students majoring in those areas; at the University of Wisconsin in Madison, for example, future secondary school teachers must meet a state requirement of 34 credits in their major subjects, whereas liberal arts majors typically need only 30 credits.

(3) Studies have *not* found that higher teacher salaries are associated with higher student achievement. The implication that teachers are not working hard, or are ineffective, because of low pay, or that they would behave differently if they were paid more, has not been substantiated. Moreover, the argument that higher salaries are required to attract or retain teachers in critical areas such as mathematics must be examined in light of recent data that show only 5 percent of experienced math teachers leave the profession yearly, some for retirement.

Competitive salaries would certainly seem to be part of the working conditions that attract or do not attract to teaching, but the reports do not address other aspects of the workplace which may be more or equally important, such as social status and responsibility.

(4) The hiring by school systems of uncredentialed or partially credentialed teachers must be sharply distinguished from the hiring of *unqualified* teachers. The reports do not document that students of undercredentialed teachers perform worse than those of credentialed teachers, and indeed there could be incentive for an untenured, undercredentialed teacher to make greater effort in the classroom than a tenured, fully credentialed teacher. Also, most school systems which employ uncredentialed persons require them to take courses leading to credentialing while teaching, which may provide a direct avenue for applying what is learned. This leaves untouched, of course, the practice of some systems of shifting credentialed teachers from a subject area of competence to one in which they are not trained, in which case the system is truly using an *unqualified* teacher.

The commissions do propose one significant change in the way teachers are rewarded which we and others believe might lead to improved student performance, when they call for relating teacher status and salary to effectiveness. Over recent months, this has led to considerable discussion of various "merit pay" and "master teacher" approaches. The debate has generally been fruitful, and has apparently resulted in a general perception that merit pay may not be a particulary good way to improve instruction or retain good teachers, but that the master teacher strategy has promise.

In their proposals, the commissions did not address the political issues raised by their recommendations for "tiers" of teaching, or career paths with increased responsibility, and those issues have been fought out generally in state legislatures over the past year.

Conclusions

A variety of criticisms can be levelled at the four commission reports, including that they used weak arguments and poor data to make their case for re-

form, and that their recommendations were simplistic and failed to take account of the ramifications of implementing them.

They proposed increasing time without improving pedagogy and adopting "new" basics without changing old definitions. They ignored numerous problems—teenage unemployment, teacher burnout and high student dropout rates—that must be solved before American education can be considered sound.

Blind acceptance of the recommendations could lead to little improvement, and, worse, to disenchantment with reform.

Even taking these criticisms into account, however, it must be said that the reports made important recommendations. Their calls for increased academic requirements, curriculum reform, computer competency, and career ladders for teachers could improve education.

Most significantly, the commissions have succeeded in making the crisis in education a public concern. The current focus on education increases the likelihood that successful reforms can be made. The ongoing debate over master teacher plans in many states and local districts is an example. Educators should follow those efforts closely. Their success or failure will be the ultimate test of the four commissions' reports.

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Lawrence Stedman is Project Assistant, Education Policy Studies Department, School of Education, University of Wisconsin-Madison.

A Conclusion from the Council for Basic Education

The Council for Basic Education was established in 1956 by a group of distinguished leaders from the academic community and from business, industry, and publishing who believed that a sound education in the liberal arts should be available to all children.

Since its founding, the Council has subscribed to the following principles:

▶ *Academic education is the primary mission of schools.*

▶ *Certain subjects are basic because they are generative: i.e., they make other learning possible. Those subjects are the liberal arts: English, including reading, writing, speaking, and literature; mathematics; science; history, government, and geography; a second language, and the arts.*

▶ *All children can learn those subjects, and all children need to learn them, since all face the same future of lifelong learning, citizenship, and earning a livelihood.*

▶ *Teachers should be qualified by education, professional training, and temperament.*

In light of these long-standing commitments, the Council has noted with special interest the recommendations of many of the national commissions whose reports are reviewed in this volume.

Academic Education: The Generative Subjects

The nine major national reports, without exception, stress that mastery of basic academic skills is essential for individual success in employment, citizenship, personal fulfillment, college entrance, and continuing lifetime learning. A tenth report which deals specifically with vocational education finds mastery of academic skills an essential part, or prerequisite, of occupational training.

Generally, the reports agree that academic rigor has declined in American schools. They indicate that academic preparation is inadequate in elementary schools, and that many high school courses, especially in the general and vocational curriculum but often in the college-preparatory curriculum as well, have little academic content.

There is concern that teachers themselves lack academic background, and that students are bored with and not much interested in academic subjects.

The curricular "smorgasbord" which allows nonacademic courses the same status for credit and graduation as academic courses comes in for criticism. Recommendations for increasing the number of courses required for high school graduation aim exclusively at what are generally considered to be academic subjects, stipulating additional years of English, history, mathematics, or science.

The reports state the case for an "academic" education in various ways.

For *The Paideia Proposal*, academic training is the single appropriate function of schools, with "academic" defined to mean acquisition of information, development of the intellectual skills needed to process information, and understanding of concepts and ideas.

The report of the National Commission on Excellence in Education, *A Nation at Risk*, does not define what it means by "academic," when it says that "A study of the school week in the United States found that some schools provided students only 17 hours of instruction during the week, and the average school provided only 22."

In its recommendations, however, the Commission lays out five basics of the curriculum, including English, mathematics, science, social studies, and computer science, plus study of a foreign language for the college-bound; the Council for Basic Education defines these as the basic subjects to be included in an academic curriculum.

The Excellence Commission also recommends that schools and colleges adopt more rigorous and measurable standards and higher expectations for academic performance, and indicates that grades should be "indicators of academic achievement."

In "the crucial eight grades leading to high school," the curriculum should build a sound base for study in English language development and writing, computational and problemsolving skills, science, social studies, foreign language, and the arts, and should "foster an enthusiasm for learning."

The College Board's focus in its report on what

students should know and be able to do in preparation for college is clearly academic; the Board describes six "basic academic subjects" which should be studied in high school and six "basic academic competencies" that students should acquire.

The Board's report also offers a useful insight into what it means by "academic"; students are not born with the basic academic competencies, it says; they are learned in school. (The Board's basic academic competencies are reading, writing, speaking and listening, mathematics, reasoning, and studying; its basic academic subjects are English, the arts, mathematics, science, social studies, and foreign language. These parallel the areas of study recommended by the Council for Basic Education for all children, not just the college-bound.)

Action for Excellence, the economic development-oriented report of the Education Commission of the States, suggest states should "have the courage to put new emphasis on core academic subjects" in cases where "nonessential and peripheral courses have invaded the curriculum."

The Twentieth Century Fund's Task Force on Federal Elementary and Secondary Education Policy says, "Schools across the nation must at a minimum provide the same core components to all students. These components are the basic skills of reading, writing, and calculating; technical capability in computers; training in science and foreign languages; and knowledge of civics, or what Aristotle called the education of the citizenry in the spirit of the polity."

The three books reviewed in this volume, *High School, A Place Called School*, and *Horace's Compromise*, all based on visits to schools by researchers and observers, concentrate almost entirely on the need to redefine and revitalize the academic subjects and the manner in which they are taught at all levels of schooling.

Education for All Children

The Council for Basic Education believes that the crucial test of the reforms urged in these and other reports will be whether improvements in American education become available to *all* students.

As with their emphasis on academic curriculum, the reports unanimously make reference to equality of opportunity, and in many cases they reject common practices such as tracking and grouping of students as counterproductive or discriminatory.

Whether the reports, or the reforms they may spark, truly reflect the Council's conviction that all students can indeed learn the basic curriculum is still an open question. Some state actions toward strengthening academic requirements are already criticized as "elitist," and there is some evidence that educators do not fully accept the possibility of combining excellence with equal access.

Of the reports, only one, *The Paideia Proposal*, offers advice on the changes in pedagogy that may be necessary to make a core body of academic knowledge fully available to all students. The fundamental fact that present instruction methods do not reach some children, or that some academic competencies cannot successfully be taught to *any* children by our current methods, is not addressed in most of the other reports, though it is touched upon, expressly or by implication, in the three thoughtful books by John Goodlad, Ernest Boyer, and Theodore Sizer.

The Council for Basic Education is encouraged by the words of the most widely noticed of the reports, that of the National Commission on Excellence in Education, on the universal applicability of its proposed high standards for education : "... all children, by virtue of their own efforts, competently guided, can hope to attain the mature and informed judgment needed to secure gainful employment, and to manage their own lives, thereby serving not only their own interests but also the progress of society itself."

Teachers: 'Education, Training, Temperament'

The national reports on education reviewed in this volume have contributed to what is surely an unprecedented examination of the preparation, certification, evaluation, and compensation of teachers.

The Council for Basic Education believes that successful education of all children in the basic academic curriculum is absolutely dependent on teachers who are temperamentally suited to working with children, who enjoy the particular challenges and excitements of teaching, and who are themselves broadly educated and professionally skilled. Good teaching, in short, is the heart of the matter.

There is some danger to the far-reaching reforms envisioned by the reports however, if state legislatures or school boards look only to the qualifications of their teachers, and not beyond, in attempting to implement these recommendations.

The Council salutes and supports needed improvements in teacher competence, but it believes that no amount of attention to one element of the complex education process, even so important an element as the teaching staff, will bring about the redirection of schooling envisioned in the reports.

Charting A Course

The Council for Basic Education finds the national reports deeply significant as part of a continuing examination of education in the United States which has gone on for most of the latter half of this century.

We welcome this opportunity to add our voice to those who would make an excellent education in the basic academic subjects available to all children in our country.

Appendix

Following we present how the reports were put together, by whom, how long they were in preparation, the method of inquiry used, and the release date of each report.

Title: *The Paideia Proposal: An Educational Manifesto*

Group: The Paideia Group

Members:
Mortimer Adler, Chair, Director, Institute for Philosophical Research; Chairman, Board of Editors, Encyclopedia Britannica
Jacques Barzun, former Provost, Columbia University, Literary Adviser, Charles Scribner's Sons
Otto Bird, former head, General Program of Liberal Studies, University of Notre Dame
Leon Botstein, President, Bard College; President, Simon's Rock of Bard College
Ernest L. Boyer, President, Carnegie Foundation for the Advancement of Teaching
Nicholas L. Caputi, Principal, Skyline High School, Oakland, Calif.
Douglas Cater, Senior Fellow, Aspen Institute for Humanistic Studies
Donald Cowan, former President, University of Dallas; Fellow, Dallas Institute of Humanities and Cultures
Alonzo A. Crim, Superintendent, Atlanta Public Schools, Atlanta, Ga.
Clifton Fadiman, Author and critic
Dennis Gray, Deputy Director, Council for Basic Education
Richard Hunt, Senior Lecturer and Director, Andrew W. Mellon Faculty Fellowships Program, Harvard University
Ruth B. Love, General Superintendent of Schools, Chicago Board of Education
James Nelson, Director, Wye Institute, Queenstown, Md.
James O'Toole, Professor of Management, Graduate School of Business Administration, University of Southern California
Theodore T. Puck, President and Director, Eleanor Roosevelt Institute for Cancer Research, Inc.; Professor of Biochemistry, Biophysics and Genetics, University of Colorado
Adolph W. Schmidt, former Chairman, Board of Visitors and Governors, St. Johns College
Adele Simmons, President, Hampshire College
Theodore R. Sizer, Chairman, A Study of High Schools; Chairman, Department of Education, Brown University
Charles Van Doren, Associate Director, Institute for Philosophical Research; Vice President/Editorial, Encyclopedia Britannica
Geraldine Van Doren, Senior Fellow, Institute for Philosophical Research; Secretary, Paideia Project
John Van Doren, Senior Fellow, Institute for Philosophical Research; Executive Editor, *Great Ideas Today*

Author; Mortimer J. Adler

Focus: Elementary and Secondary Education

Method of Inquiry: The report grew out of discussions among the members of the Paideia Group and reflects a philosophical viewpoint.

Time Period: The report was released in September 1982 after one year of study and discussion.

■

Title: *A Nation at Risk: The Imperative for Educational Reform*

Group: The National Commission on Excellence in Education, appointed by U.S. Secretary of Education Terrel Bell

Members:
David P. Gardner, Chair, President, University of California
Yvonne W. Larsen, Vice Chair, Immediate Past President, San Diego City School Board
William O. Baker, Chairman of the Board (retired), Bell Telephone Laboratories

Anne Campbell, former Commisisioner of Education, Nebraska
Emeral A. Crosby, Principal, Northern High School, Detroit, Mich.
Charles A. Foster, Jr., Immediate Past President, Foundation for Teaching Economics
Norman C. Francis, President, Xavier University of Louisiana
A. Bartlett Giamatti, President, Yale University
Shirley Gordon, President, Highline Community College, Midway, Wash.
Robert V. Haderlein, Immediate Past President, National School Boards Association
Gerald Holton, Mallinckrodt Professor of Physics and Professor of the History of Science, Harvard University
Annette Y. Kirk, Kirk Associates, Mecosta, Mich.
Margaret S. Marston, Member, Virginia State Board of Education
Albert H. Quie, former Governor of Minnesota
Francisco D. Sanchez, Jr., Superintendent of Schools, Albuquerque, N.M.
Glenn T. Seaborg, University Professor of Chemistry and Nobel Laureate, University of California, Berkeley
Jay Sommer, National Teacher of the Year, 1981-82, Foreign Language Department, New Rochelle High School, New Rochelle, N.Y.
Richard Wallace, Principal, Lutheran High School East, Cleveland Heights, Ohio

Author: Not identified

Focus: Secondary education

Method of Inquiry: The Commission held hearings, made site visits, commissioned papers, drew on the literature and staff work, and held discussions.

Time Period: The report was released in April 1983 after 18 months of study and deliberation.

■

Title: *Action for Excellence*

Group: Task Force on Education for Economic Growth, Education Commission of the States

Members:
James B. Hunt, Jr., Chair, Governor of North Carolina
Frank T. Cary, Co-Chair, Chairman of the Executive Committee, IBM Corporation
Pierre S. duPont IV, Co-Chair, Governor of Delaware
Lamar Alexander, Governor of Tennessee
D. Robert Graham, Governor of Florida
Thomas Kean, Governor of New Jersey
Richard D. Lamm, Governor of Colorado
Scott M. Matheson, Governor of Utah
George Nigh, Governor of Oklahoma
Robert D. Orr, Governor of Indiana
Rudy Perpich, Governor of Minnesota
Charles S. Robb, Governor of Virginia
Richard L. Thornburgh, Governor of Pennsylvania
William F. Winter, Governor of Mississippi
Wilhelmina Delco, State Representative, Texas
Anne Lindeman, State Senator, Arizona
Oliver Ocasek, State Senator, Ohio
Thornton F. Bradshaw, Chairman, RCA Corporation; Chairman, Conference Board
J. Fred Bucy, President, Texas Instruments
Philip Caldwell, Chairman of the Board and Chief Executive Officer, Ford Motor Company
James Campbell, President, MISSCO Corporation; Chairman, Education, Employment and Training Committee, U.S. Chamber of Commerce
John H. Johnson, President, Johnson Publishing Company
David T. Kearns, President and Chief Executive Officer, Xerox Corporation; Member, Business Roundtable
Robert W. Lundeen, Chairman of the Board, Dow Chemical Company; Trustee, Committee for Economic Development
J. Richard Munro, President and Chief Executive Officer, Time, Inc.
William C. Norris, Chairman of the Board and Chief Executive Officer, Control Data Corporation
Bernard J. O'Keefe, Chairman and Chief Executive Officer, EG and G, Inc.; Chairman, National Association of Manufacturers
James E. Olson, Vice Chairman, Board of Directors, American Telephone and Telegraph Company
John R. Purcell, Chairman, Chief Executive Officer and President, SFN Companies, Inc.
Robert D. Day, President, Life Investors, Inc.
Glenn E. Watts, President, Communications Workers of America
Bruce Brombacher, National Teacher of the Year, 1982-83, Jones Junior High School, Upper Arlington, Ohio
Calvin M. Frazier, Commissioner of Education, Colorado
William C. Friday, President, University of North Carolina
Marvin O. Koenig, Principal, Southeast High School, St. Louis, Mo.
Floretta McKenzie, Superintendent of Schools, Washington, D.C.
Judith Moyers, Education Specialist, New York, N.Y.
Joanne T. Goldsmith, President, National Association of State Boards of Education
Anna J. Harrison, Professor Emeritus, Chemistry, Mount Holyoke College; President, American Association for the Advancement of Science
M. Joan Parent, President, National School Boards Association
Frank Press, President, National Academy of Sciences

Author: Not identified

Focus: K-12 education for productive employment

Method of Inquiry: Task force members discussed issues until they reached consensus on problems and recommendations.

Time Period: The report was released in May 1983 after one year of deliberation.

■

Title: *Academic Preparation for College: What Students Need To Know and Be Able To Do*

Group: The College Board's EQuality Project.

Members: Not identified. Two hundred high school and college teachers served as members of various College Board committees and councils.

Author: Not identified.

Focus: High school preparation for college.

Method of Inquiry: The College Board collected data from 1,400 people through questionnaires and meetings.

Time Period: The report was released in May 1983 after three years of preparation.

■

Title: *Making the Grade*

Group: Twentieth Century Fund Task Force on Federal Elementary and Secondary Education Policy

Members:

Robert Wood, Chair, Henry R. Luce Professor of Democratic Institutions and Social Order, Wesleyan University; former Director of Urban Studies, University of Massachusetts; former Superintendent, Boston Public Schools

Brewster C. Denny, Professor Public Affairs, former Dean, Graduate School of Public Affairs, University of Washington

Chester E. Finn, Jr., Co-Director and Professor of Education and Public Policy, Center on Educational Policy, Institute for Public Policy Studies, Vanderbilt University

Professor of the History of Education, Graduate School of Education, Harvard University

Charles V. Hamilton, Wallace S. Sayre Professor of Government, Department of Political Science, Columbia University

Languages, Hunter College

Diane Ravitch, Adjunct Associate Professor, Teachers College, Columbia University

Wilson Riles, Wilson Riles & Associates, Sacramento; former Superintendent of Public Instruction, California

Donald M. Stewart, President, Spelman College, Ga.

Robert E. Wentz, Superintendent, Clark County School District, Las Vegas, Nev.

Rosalyn Yalow, Department of Clinical Science, Montefiore Medical Center, New York, N.Y.

Author: Not identified

Focus: Federal elementary and secondary education policy

Method of Inquiry: The report grew out of discussions of a background paper prepared by Paul E. Peterson from existing data on the federal role in education. Peterson is Professor of Political Science and Education, Department of Political Science, University of Chicago

Time Period: The report was released in May 1983 after 18 months of preparation.

■

Title: *High School: A Report on Secondary Education in America*

Group: The Carnegie Foundation for the Advancement of Teaching

Members: The study was advised by a 28-member National High School Panel consisting of:

Myron Atkin, Dean, School of Education, Stanford University

Beverly Joyce Bimes, St. Louis, Mo.

Derek Bok, President, Harvard University

Anne Campbell, former Commissioner of Education, Nebraska

Joan Ganz Cooney, President, Children's Television Workshop

Lawrence A. Cremin, former President, Teachers College, Columbia University

Alonzo Crim, Superintendent of Schools, Atlanta, Ga.

Walter Cronkite, CBS News

Emeral A. Crosby, Principal, Northern High School, Detroit, Mich.

Patrick L. Daly, Vice President, American Federation of Teachers

Norman C. Francis, President, Xavier University of Louisiana

Mary Hatwood Futrell, President, National Education Association

James R. Gaddy, Principal, New Rochelle High School, New Rochelle, N.Y.

Peggy Hanrahan, Principal, Mentor High School, Mentor, Ohio

Leslie Koltai, Chancellor, Los Angeles Community College District

Marigold Linton, Professor of Psychology, University of Utah

William M. Marcussen, Vice President, Atlantic Richfield Company

Ralph McGee, Principal, New Trier East Township High School, Winnetka, Ill.

James P. Olivero, Project Leadership Executive, Professional Development Program Association of California
Rayma C. Page, former President, National School Boards Association, Fort Myers, Fla.
Alan Pifer, President Emeritus, Senior Consultant, Carnegie Corporation of New York
Lauren Resnick, Co-Director, Learning Research & Development Center, University of Pittsburgh
Tomas Rivera, Chancellor, University of California, Riverside
Adele Simmons, President, Hampshire College
Virginia Sparling, former President, National Parent and Teachers Association
Robert Wheeler, former Superintendent of Schools, Kansas City, Mo.
W. Willard Wirtz, Wirtz and LaPointe, Washington, D.C.
Daniel Yankelovich, Yankelovich, Skelly and White, Inc., New York, N.Y.

Author: Ernest L. Boyer

Focus: Secondary Education

Method of Inquiry: National panel visited schools, reviewed findings, debated proposals for reform. Foundation staff reviewed literature, visited schools and talked with educators. A team of 25 educational observers visited 15 high schools for 20 days each.

Time Period: Report was issued in May 1983 after a study of three years.

■

Title: *Educating Americans for the 21st Century*
The publication is subtitled: *A plan of action for improving mathematics, science and technology education for all American elementary and secondary students so that their achievement is the best in the world by 1995.*

Group: The National Science Board Commission on Precollege Education in Mathematics, Science and Technology

Members:
William T. Coleman, Jr., Co-Chair, Senior Partner, O'Melveny and Myers, Washington, D.C.; former U.S. Secretary of Transportation
Cecily Cannan Selby, Co-Chair, Board of Advisors, North Carolina School of Science and Mathematics
Lew Allen, Jr.,Director, Jet Propulsion Laboratory and Vice President, California Institute of Technology
Victoria Bergin, Associate Commissioner of Education, Texas
George Burnet, Jr. Chairman, Nuclear Engineering Department, Iowa State University
William H. Cosby, Jr., Entertainer, educator
Daniel J. Evans, United States Senator; former President, Evergreen State College, Washington
Patricia Albjerg Graham, Dean, Graduate School of Education, Harvard University
Robert E. Larson, Chief Executive Officer, Optimization Technology, Inc.
Gerald D. Laubach, President, Pfizer, Inc.
Katherine P. Layton, Teacher, Mathematics Department, Beverly Hills High School, California
Ruth B. Love, General Superintendent, Chicago Board of Education
Arturo Madrid II, Professor, Department of Spanish and Portugese, University of Minnesota
Frederick Mosteller, Chairman, Department of Health Policy and Management, School of Public Health, Harvard University
M. Joan Parent, Immediate Past President, National School Boards Association
Robert W. Parry, Distinguished Professor of Chemistry, University of Utah,
Benjamin F. Payton, President, Tuskegee Institute
Joseph E. Rowe, Executive Vice President, Research and Defense Systems, Gould, Inc.
Herbert A. Simon, Richard King Mellon University Professor of Computer Science and Psychology, Carnegie-Mellon University
John B. Slaughter, Chancellor, University of Maryland; former Director, National Science Foundation

Author: Not identified

Focus: K-12 education in science, mathematics, and technology

Method of Inquiry: The report was based on testimony and commissioned papers and visits to exemplary programs.

Time Period: The report was published in September 1983 after 18 months of study.

■

Title: *A Place Called School: Prospects for the Future*

Group: A Study of Schooling

Members: A six-member advisory committee advised on the study. They were:
Ralph W. Tyler, Chair, Director Emeritus, Center for Advanced Study in the Behavioral Sciences
Gregory Anrig, President, Educational Testing Service; former Commissioner of Education, Massachusetts
Stephen K. Bailey, political scientist and policy analyst, who at the time of his death was Associate Dean of the Harvard Graduate School of Education
Lawrence A. Cremin, former President, Teachers College, Columbia University

Robert K. Merton, Giddings Professor of Sociology, emeritus, Columbia University
Arthur Jefferson, General Superintendent, Detroit Public Schools, Michigan

Author: John I. Goodlad

Focus: Elementary and secondary education

Method of Inquiry: The report was based on questionnaires, documents search, and intensive observations in 38 schools across the country.

Time Period: The report was published in September 1983 after a five-year study, plus two years of planning and preparation.

■

Title: *Horace's Compromise: The Dilemma of the American High School*

Group: A Study of High Schools, of which this is the first report, was cosponsored by the National Association of Secondary School Principals and the Commission on Educational Issues of the National Association of Independent Schools.

Members: Not organized as a formal commission or study group.

Author: Theodore R. Sizer

Method of Inquiry: For the Study of High Schools, five writers and a part-time field and research staff of 20 observed intensively 11 public and four private high schools in San Diego, Calif.; Denver, Colo.; Boston, Mass.; northern Ohio and southern Alabama. The author of this book visited 80 high schools in the United States and abroad.

Time Period: The report was published in February 1984 after a three-year study.

■

Title: *Education for Tomorrow's Jobs*

Group: Committee on Vocational Education and Economic Development in Depressed Areas, National Research Council, National Academy of Sciences

Members:
Colin C. Blaydon, Chair, Dean, Amos Tuck School of Business Administration, Dartmouth College
William A. Morrill, Vice-Chair, President, Mathematica Policy Research, Inc., Princeton, N.J.
Charles S. Benson, Department of Education, University of California, Berkeley
Charles E. Bradford, International Association of Machinists and Aerospace Workers, Washington, D.C.
Pat Choate, TRW, Inc., Washington, D.C.
Pedro Garza, SER-Jobs for Progress, Dallas, Texas
James M. Howell, First National Bank of Boston
Janice Madden, Department of Regional Science, University of Pennsylvania
Paul E. Peterson, Brookings Institution
George R. Quarles, Office of Occupational and Career Education, New York City Board of Education
Wilson Riles, Education consultant, Sacramento, Calif.
Isabel Sawhill, The Urban Institute
Richard F. Schubert, American Red Cross
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